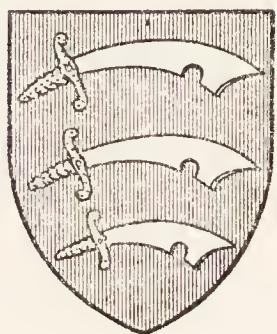


LXXV
1964

COUNTY COUNCIL OF ESSEX



R E P O R T
OF THE
**County Medical Officer of Health
FOR THE YEAR**

1964

J. A. C. FRANKLIN
M.B., B.S., D.P.H.

COUNTY MEDICAL OFFICER OF HEALTH

CONTENTS



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PREFACE

COUNTY HALL
CHELMSFORD

Telephone : CHELMSFORD 3233

October, 1965

To the Chairman, Aldermen and Councillors of the County Council of Essex

Mr. Chairman, Ladies and Gentlemen,

In presenting the seventy-fifth Annual Report of the County Medical Officer of Health, for the year 1964, I should like to mention that the survey actually covers the last three months of office of my predecessor, Dr. George G. Stewart, who retired on 31st March, 1964, and nine months of my own first year of office.

Summarising briefly the vital statistics dealt with in the Report, the mid-1964 population of the County was estimated by the Registrar General to be 1,942,780, an increase of 24,360 over the figure for 1963. The larger population increase was associated with more births, fewer deaths and an increase in migration into the North-East and Mid-Essex Health Areas, offset by an increase in movement out of Metropolitan Essex.

There was a further increase in the birth rate to 17·9 per 1,000 population. This rate has gone up each year since 1955, when it was 14·3. The adjusted birth rate of 17·7 was some 4 per cent. below the national rate.

Both the stillbirth rate at 14·8 and the infant mortality rate at 16·4 per 1,000 births were the lowest ever recorded in the County. The perinatal mortality rate was 24·6 per 1,000 births compared with 26·5 in 1963 and 27·7 in 1962. Maternal deaths numbered 4 giving a very favourable maternal mortality rate of 0·11.

The death rate from all causes was 10·0 per 1,000 population, equalling the low rate achieved in 1960. The adjusted rate was 11·1 compared with the national rate of 11·3. The number of deaths decreased in most age groups and for most causes but there was a further increase in the number of deaths from malignant disease at most ages for both sexes, and from coronary disease especially in men between 55 and 65. Two hundred and forty six people died as a result of motor vehicle accidents. This was 32 more than in 1963 and the highest number recorded in any one year. The increase was largest for men under 65.

The report includes in an Appendix an analysis of the number of congenital malformations apparent at birth reported to the Registrar General. These numbered 475, equivalent to 13·5 per 1,000 births. Figures are given for all the main types of malformation and the effect of season, maternal age and parity is considered.

In the Report for 1962 details were given of the Ten Year Development Plan which the Minister of Health had requested all Local Health and Welfare Authorities to prepare and in the Report for the following year a reference was made to the first annual review of the Plan. In 1964, although the Minister did not request particulars of a second annual review, he assumed such a review would be made and the County Council did in fact revise their programme of capital projects over the ten year period and this resulted in a number of amendments, mainly concerned with rephasing the commencing dates of various projects.

Reference is made in the Report to the problems which arise from the ever-increasing consumption of water in what is one of the driest parts of the country, a situation which was to become even more serious early in 1965 owing to the abnormally low rainfall in 1964. The River Authorities which were set up under the Water Resources Act, 1963, and whose duties include reporting upon present and future demands for water supplies and making proposals in accordance with the overall policy on the Water Resources Board for meeting the situation are confronted with a difficult task.

The provision of sewerage and sewage disposal facilities in rural areas is dealt with in some detail and once again attention is drawn to the considerable differences which still exist in Rural Districts regarding the provision of main drainage for villages which can be economically sewered.

A number of developments in the Ambulance Service are reported including the experimental appointment (jointly with Hospital Management Committees) of Transport Officers at the larger hospitals with the object of improving the service, particularly to ensure that patients are returned to their homes after treatment with the least possible delay. Details are given of a decision to revert to the use of petrol-engined ambulance vehicles after seven years' experience in utilising diesel-engined vehicles as it had been found that the latter, even if a little more economical to run than the former, were not giving patients such a comfortable ride owing, in particular, to vibration.

Once again many developments in the Mental Health Service are reported, including the opening of a new Training Centre and two new Residential Hostels for persons recovering from mental illness; details are also given of three other new Training Centres which were in process of building.

Particular reference is made to the great amount of voluntary work undertaken in the Mental Health Service which takes the form of making gifts of materials and equipment, rendering personal services and arranging entertainments and other social activities both in training centres and residential hostels. Voluntary service of this nature adds immensely to the quality of the work carried out at these establishments and is a source of great encouragement to the staff.

In the Maternity and Child Welfare Services and the Nursing Services although no spectacular new departures are reported, a great amount of good

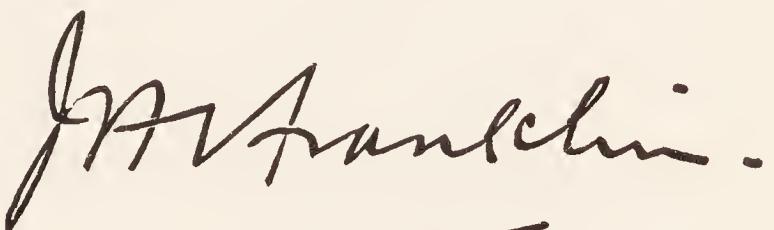
work is again put on record in the Sections dealing with these facilities, which are of course among the more old-established services—indeed in this connection it is pleasant to recall that in the year under review the 60th Anniversary of the first occasion on which Health Visitors were employed in Essex was duly commemorated.

Health Education might well be a description of the greater part of the Department's activities, but taking it to mean, in the more restricted sense, the programme of demonstrations, film shows, talks, exhibitions and other features which are designed to persuade people of the benefits of positive health, the Report includes many facts and figures on the achievements in this field during the year. So far as Health Education in the realm of dental hygiene is concerned, a detailed description of the five-year campaign in Harlow, which is now drawing to a close, is given in the Report of the Chief Dental Officer and it now remains to await the final conclusions on this most interesting scheme from which we may have much to learn for planning future action. The present position in regard to the fluoridation of water supplies is outlined in an Appendix to the Report of the Chief Dental Officer.

In conclusion, may I express my thanks to the Chairman and Members of the Health Committee for their support throughout the year and to all members of my staff for their endeavours at a time when the preparatory work in connection with the re-organisation of London Government in Greater London was becoming more and more pressing. As the date for the transfer of functions to the Greater London Council and the new London Boroughs was 1st April, 1965, it would be fitting to deal with this matter more fully in my next Annual Report; in the meantime an idea of the size and complexity of the impending transfer operation which caused much pre-occupation throughout 1964, may be obtained from the fact that some 3,000 members of the Department's staff (including Domestic Helps), 185 properties and 180 motor vehicles were to be transferred on the Appointed Day. While dealing with these transfer arrangements in the best interests of both the public and the staff concerned it has of course been no less important to plan the future shape of the services which will remain in the New County of Essex.

I am, Ladies and Gentlemen,

Your obedient Servant,



County Medical Officer of Health

COUNTY COUNCIL OF ESSEX

HEALTH COMMITTEE

(as at 31st December, 1964)

Chairman—Alderman K. E. B. GLENNY, O.B.E., J.P.

Vice-Chairman—Councillor Mrs. S. M. BOVILL

County Council Members—

Aldermen—

Mrs. M. Ball	J. Martin, B.E.M., J.P.
Mrs. M. Bredo	G. W. Mason
A. E. Brown, J.P.	*S. W. Millard
*G. F. Chaplin, C.B.E., J.P.	O. L. Oxley
	Mrs. E. C. Saywood

Councillors—

F. W. Aylmore	Mrs. J. L. Lock
A. C. Berry	G. S. B. McNaughton
W. J. Bowstead, J.P.	Mrs. W. M. Palethorpe
Mrs. A. M. M. Burrell	Mrs. N. M. Plunkett
Mrs. G. M. Chamberlin	J. R. Sweetland
Mrs. E. Coker, B.Sc.	H. R. Turner
Mrs. M. R. Davey	C. Verdult
A. J. Davidson	Mrs. V. L. Walton
Mrs. L. Fallaize, J.P.	Mrs. A. E. Welsh
Mrs. V. M. Grose	Mrs. N. E. Willis
E. F. Harris	Mrs. V. L. Wilson
Mrs. M. J. Harvey	E. T. Wootton
F. H. James	F. A. Wortley
R. P. King	W. R. Wright

Other Members—

Appointed by the County Council—

Mrs. S. C. M. Godfrey, J.P.	Miss E. M. Tindall, M.B.E.
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Nominated by Other Bodies—

Dr. H. E. Bach	Capt. G. E. M. Kemball
Mrs. E. L. Baldwin	Mrs. B. K. Lowton
H. E. Bates, M.M., J.P.	E. W. Marshall
I. T. Brown	F. R. Masters
Mrs. J. Callan	Mrs. E. M. Millard
Mrs. F. M. Cottee	Mrs. R. Moreton Monks
Mrs. B. E. Double, J.P.	C. F. Thirkettle
Dr. S. C. Emerick	A. J. Twigger
Mrs. E. F. M. Hollis, M.B.E.	Lt.-Col. C. L. Wilson, O.B.E., M.C., D.L.
Mrs. L. A. Irons, J.P.	

**Ex-officio Member*

STAFF OF THE HEALTH DEPARTMENT

(as at 31st December, 1964)

1. CENTRAL OFFICE

County Medical Officer of Health:

J. A. C. FRANKLIN, M.B., B.S., D.P.H. (commenced 1.4.64)

Deputy County Medical Officer of Health:

R. D. PEARCE, M.R.C.S., L.R.C.P., D.P.H. (commenced 1.4.64)

Principal Medical Officers:

ELIZABETH M. SEFTON, M.R.C.S., L.R.C.P., D.C.H., D.P.H. (commenced 7.9.64)

S. W. G. CASELEY, M.B., Ch.B., D.P.M. (commenced 9.1.64)

Senior Medical Officer:

I. B. MILLAR, M.D., B.Ch., B.A.O., D.P.H.

Assistant Medical Officer:

*LILIAN BATES, M.D. (Paris), D.P.H.

Medical Superintendent, Royal Eastern Counties Hospital:

*RALPH BATES, F.R.C.S., D.P.M.

Chest Physicians:

(Joint appointments with Regional Hospital Boards)

*J. T. BROWN, M.B., Ch.B., D.P.H.

*R. C. COHEN, M.D., B.S., D.P.H.

*H. DUFF PALMER, M.B., Ch.B., D.P.H.

*R. S. FRANCIS, M.D., M.R.C.P.

*M. J. GREENBERG, M.A., M.B., B.Chir., M.R.C.P., M.R.C.S.

*F. KELLERMAN, M.D., L.R.C.P., L.R.C.S.

*VIVIEN U. LUTWYCHE, M.D., M.R.C.P.

*J. T. PATERSON, M.B., Ch.B.

*E. G. PYNE, M.B., Ch.B., D.P.H.

*H. RAMSAY, M.D., B.S., M.R.C.S., L.R.C.P.

*E. G. SITA-LUMSDEN, M.A., M.D., M.R.C.P.

*S. J. STEEL, M.B., B.S., M.R.C.S., L.R.C.P.

*M. WEINBERGER, M.D.

*E. WOOLF, M.R.C.S., L.R.C.P.

Chief Dental Officer:

J. BYROM, L.D.S.

Superintendent Nursing Officer:

MISS F. S. LEADER, S.R.N., S.C.M., Q.N., H.V. Cert.

County Domestic Help Organiser:

MISS G. H. JENKINS

* Part-time officer

County Health Inspector:
S. E. WILLIS, M.A.P.H.I., M.I.P.H.E., M.R.S.H.

Assistant County Health Inspectors:
W. J. HODGKINS, M.A.P.H.I., M.R.S.H.
M. E. ROSELL, M.A.P.H.I., M.R.S.H.

Technical Assistant:
A. G. CHAMBERS

Sampling Officer:
L. A. ROWLANDS

County Ambulance Officer:
W. E. COOKE

Assistant County Ambulance Officers:
J. R. PEACHAM
A. J. STEWART

Supervising Mental Welfare Officer:
K. M. SKINGLEY

Organiser of Training Centres:
D. J. NORRIS

Health Education Organiser:
C. E. WILLIAMS, M.R.S.H.

Assistant Health Education Organiser:
H. BRADLEY

Statistician:
W. H. LEAK, B.A., F.S.S.

Chief Administrative Officer:
J. G. COX

Principal Administrative Assistant:
E. W. AMOS

Senior Administrative Assistants:
D. C. PARKER
H. GIBSON
C. E. BODEN

Administrative and Clerical Staff:
59 whole-time and 1 part-time

2. CENTRALLY ADMINISTERED SERVICES

Ambulance Service :

Area Superintendents .....	.....	.....	.....	.....	.....	.....	9
Assistant Area Superintendents .....	.....	.....	.....	.....	.....	.....	3
Control Supervisors .....	.....	.....	.....	.....	.....	.....	2
Controllers .....	.....	.....	.....	.....	.....	.....	10
Assistant Controllers .....	.....	.....	.....	.....	.....	.....	8
Control Operatives .....	.....	.....	.....	.....	.....	.....	17
Clerk Telephonists .....	.....	.....	.....	.....	.....	.....	11
Station Officers .....	.....	.....	.....	.....	.....	.....	8
Assistant Station Officers .....	.....	.....	.....	.....	.....	.....	6
Head Drivers .....	.....	.....	.....	.....	.....	.....	28
Outposted Officer (London Hospital) .....	.....	.....	.....	.....	.....	.....	1
Driver Attendants .....	.....	.....	.....	.....	.....	.....	454
Area Clerk .....	.....	.....	.....	.....	.....	.....	1
Transport Officer .....	.....	.....	.....	.....	.....	....	1

Mental Health Service :

Senior Psychiatric Social Workers .....	.....	.....	.....	.....	.....	.....	3
Senior Mental Welfare Officers .....	.....	.....	.....	.....	.....	.....	7
Mental Welfare Officers .....	.....	.....	.....	.....	.....	.....	17
Trainee Mental Welfare Officers .....	.....	.....	.....	.....	.....	.....	5
Training Centre Supervisors .....	.....	.....	.....	.....	.....	.....	16
Training Centre Senior Assistant Supervisors .....	.....	.....	.....	.....	.....	.....	11
Training Centre Assistant Supervisors .....	.....	.....	.....	.....	.....	.....	48
Training Centre Assistant Instructors .....	.....	.....	.....	.....	.....	.....	17
Training Centre Trainee .....	.....	.....	.....	.....	.....	.....	1
Hostel Wardens .....	.....	.....	.....	.....	.....	.....	6
Hostel Assistant Wardens .....	.....	.....	.....	.....	.....	.....	13.6

Training Homes for Home Nurses and Midwives :

Superintendent .....	.....	.....	.....	.....	.....	.....	1
Deputy Superintendent .....	.....	.....	.....	.....	.....	.....	1
Other Nursing Staff .....	.....	.....	.....	.....	.....	.....	86*
Student District Nurses .....	.....	.....	.....	.....	.....	.....	9
Pupil Midwives (Part II) .....	.....	.....	.....	.....	.....	.....	25
Clerical and Administrative Staff .....	.....	.....	.....	.....	.....	.....	5†

* Includes 11 part-time employees

† Includes 1 part-time employee

3. MEDICAL OFFICERS OF HEALTH OF AUTHORITIES WITH DELEGATED POWERS

Colchester M.B.C.	*JOHN D. KERSHAW, M.D., B.S., D.P.H.
Basildon U.D.C.	*P. X. O'Dwyer, M.B., B.Ch., D.P.H.

* Part-time Officer

4. AREA MEDICAL OFFICERS

North-East Essex .....	.....	*JOHN D. KERSHAW, M.D., B.S., D.P.H.
Mid-Essex .....	.....	*J. L. MILLER WOOD, V.R.D., M.R.C.S., L.R.C.P., D.P.H.
South-East Essex .....	.....	*ALFRED YARROW, M.B., Ch.B., D.P.H.
South Essex .....	.....	*J. GORMAN, M.B., D.P.H. (Acting)
Forest .....	.....	*F. G. BROWN, T.D., M.B., B.Ch., B.A.O., D.P.H.
Romford .....	.....	*F. GROARKE, M.B., L.M., D.C.H., D.P.H.
Barking .....	.....	*MARGARET I. ADAMSON, M.B., Ch.B., D.P.H.
Dagenham .....	.....	*J. ADRIAN GILLET, M.B., Ch.B., D.P.H., F.R.S.H.
Ilford .....	.....	*I. GORDON, M.D., Ch.B., M.R.C.P., D.P.H.
Leyton .....	.....	*E. W. WRIGHT, M.B., Ch.B., D.P.H.
Walthamstow .....	.....	*M. WATKINS, M.R.C.S., L.R.C.P., D.P.H.
Harlow .....	.....	*I. ASH, M.D., D.P.H.

*Part-time Officer

5. DELEGATED AND DECENTRALISED SERVICES

		Establishment	No. employed (equivalent whole-time)
Administrative and Clerical .....	.....	289	282.3
Area Dental Officers .....	.....	14	11
Assistant County Medical Officers .....	.....	63.7	62.59
Chiropodists .....	.....	75.4	56.20
Clinic Clerks .....	.....	71.84	70.4
Day Nursery Matrons .....	.....	21	21
Day Nursery Deputy Matrons .....	.....	20	19
Day Nursery Wardens .....	.....	20	20
Day Nursery Nurses and Nursery Assistants	}	101	
Day Nursery Students in training	}	146	93*
Dental Officers .....	.....	99	44.5
Dental Surgery Assistants .....	.....	93.3	57
Dental Technicians .....	.....	9	7
Domestic Helps .....	.....	—	1,295
Domestic Help Organisers .....	.....	28	27
Health Visitors, Tuberculosis Visitors and Clinic Nurses .....	.....	387.5	373.5
Mental Welfare Officers .....	.....	3.1	3.1
Midwives, Home Nurse Midwives and Home Nurses .....	.....	470	410.6
Non-Medical Supervisors of Midwives and Superintendents of Home Nurses .....	.....	9	9
Occupational Therapists .....	.....	2	1
Oral (Dental) Hygienists .....	.....	2	—
Superintendent Health Visitors .....	.....	12	12
Training Centre Supervisors .....	.....	2	2
Training Centre Assistant Supervisors and Assistants .....	.....	11	9

* 3 Students equivalent to 1 Nursery Nurse or Nursery Assistant.

SECTION I—STATISTICAL

As requested by the Ministry of Health, certain vital statistics relating to mothers and infants are given below. The statistics for 1963 are also given for comparative purposes :—

		1964	1963
Live Births—			
Number .....	.....	34,797	33,561
Rate (per 1,000 population) .....	.....	17.9	17.5
Percentage registered as illegitimate .....	.....	5.1	4.7
Stillbirths—			
Number .....	.....	522	537
Rate (per 1,000 births) .....	.....	14.8	15.7
Total Births (live and still) .....	.....	35,319	34,098
Infant Mortality—			
Number of deaths under one year .....	.....	570	589
Rate per 1,000 live births (all infants) .....	.....	16.4	17.6
Rate per 1,000 live births (legitimate infants) .....	.....	16.1	17.3
Rate per 1,000 live births (illegitimate infants) .....	.....	22.5	22.2
Neonatal (first four weeks) mortality rate .....	.....	11.3	12.5
Early neonatal (first week) mortality rate .....	.....	9.9	10.9
Perinatal (stillbirths and first week) mortality rate .....	.....	24.6	26.5
Maternal mortality (including abortion)—			
Number of deaths .....	.....	4	12
Rate per 1,000 total births .....	.....	0.11	0.35

Most of these statistics are commented upon in detail elsewhere in this Report. In Table I on page 108 will be seen details of the population and principal vital statistics for Health Areas and County Districts including the two Districts with delegated powers. Details of deaths by cause are given for different age groups in Table II and for County Districts in Table III. As in previous years, difficulty was experienced in calculating vital statistics for the Mid-Essex and Forest Health Areas due to the fact that each includes part of the Epping and Ongar Rural District. In general, vital statistics given for these two Health Areas refer to the Area less the portion of Epping and Ongar Rural District contained in it and in the tables the figures for the Rural District are given separately. Figures for the Administrative County are unaffected by this arrangement.

The remainder of this section is devoted largely to a discussion of the figures in Tables I, II and III.

Population

The Registrar General's estimated mid-1964 population of the Administrative County was 1,942,780 compared with 1,918,420 a year previously, an increase over the year of 24,360 compared with increases of 22,820 and 33,710 in the two previous twelve month periods. The natural increase of the population was 14,775 in 1964 compared with 12,853 in 1963 and 12,217 in 1962

and the net migration into the county may be estimated at about 9,000, some 900 less than in 1963. The six Boroughs of Romford, Barking, Dagenham, Ilford, Leyton and Walthamstow and the Urban District of Hornchurch all had a large net overflow of population, the total increasing from some 6,000 to some 10,500. Fewer people came to live in four urban districts (Basildon, Brentwood, Harlow and Thurrock); total net migration into these districts amounted to about 3,900 compared with 6,000 in the previous year. In the remainder of the County, there was a substantial increase in net migration from less than 10,000 to about 15,500.

Births

The number of *live births* registered during the year was 34,797 giving a crude live birth rate of 17·9 compared with 17·5 in 1963 and 17·0 in 1962. The birth rate has now increased every year since 1955 when it stood at 14·3 per 1,000 population.

For comparison with the rate for England and Wales, it is necessary to make an adjustment for the way in which the sex and age distribution of the local population differs from that of England and Wales. The adjusted rate for the County was 17·7 compared with the national rate of 18·4.

In most parts of the County the number of births and the birth rate continue to increase but in certain districts into which there has in the past been substantial immigration a different state of affairs obtains. Thus in the Urban Districts of Basildon and Harlow the birth rate though still very high is tending to fall. In the Borough of Romford the birth rate has fallen from 10 per cent. above the County average in 1960 to nearly 10 per cent. below it in 1964. Here, the number of births also is falling. In the Borough of Dagenham and the Urban District of Chigwell there has been little change in the number of births during the last ten years and the birth rate in the latter district has remained below 13 per 1,000 population in each of the last eight years.

The number of births registered as *illegitimate* was 1,816 (37 of which were stillborn). This was 5·1 per cent. of the total number of births compared with 4·7 per cent. in 1963 and 4·6 per cent. in 1962. The number of illegitimate births and the illegitimate rate continued to rise (as recently in 1959, the 1,056 illegitimate births formed only 3·6 per cent. of all births), but the rate in Essex compared favourably with that for England and Wales as a whole (7·2 per cent.).

There were 522 *stillbirths* registered during the year (537 in 1963) giving a stillbirth rate of 14·8 per 1,000 total births compared with rates of 15·7 in 1963 and 16·3 in 1962. The stillbirth rate has fallen every year since 1957 when it stood at 21·1.

The number of *premature* births notified was 2,165 (270 of which were stillborn) compared with 2,245 in 1963. The number of premature births expressed as a percentage of total births for the last ten years is as follows :—

1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
6.6	6.6	6.8	6.4	6.5	6.7	6.5	6.3	6.6	6.1

The percentage was the lowest recorded and there seems to be a tendency for the percentage of births weighing less than $5\frac{1}{2}$ lb. to decrease, with some fluctuation from year to year. There continues to be a considerable variation in the incidence of premature births in different parts of the County, as may be seen from the following table.

	<i>Per cent. of births weighing $5\frac{1}{2}$ lb. or less</i>	
	1955-59	1960-64
North-East Essex and Colchester	6.8	6.7
Mid-Essex	6.9	6.4
South-East Essex and Basildon	6.7	6.3
South Essex	6.6	6.5
Forest and Harlow	5.9	5.7
Romford	6.7	7.1
Barking	7.9	7.1
Dagenham	7.2	7.5
Ilford	5.8	5.8
Leyton	7.3	7.9
Walthamstow	6.6	6.5
Administrative County	6.6	6.5

The prematurity percentage rose from 1955-59 to 1960-64 in only three Health Areas and two of these had a significantly high percentage in the earlier period. In 1960-64 the percentage was significantly high in these two Areas (Dagenham and Leyton) and significantly low in Ilford and the Forest Area (with Harlow).

Perinatal Mortality

The perinatal mortality rate was 24.6 per 1,000 total births compared with 26.5 in the previous year. This was the lowest rate ever recorded in the County.

The figures for the past ten years are as follows :—

1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
35.6	30.5	32.8	29.2	30.4	29.0	28.9	27.7	26.5	24.6

Comparing 1964 with earlier years, mortality in the perinatal period was lower among the smaller premature infants (those under 4 lb. 6 oz.) and somewhat higher among premature infants weighing over 5 lb. at birth.

Birth Weight	Perinatal Mortality Rate per 1,000 births				
	1958-60	1961	1962	1963	1964
3 lb. 4 oz. or less	764	777	739	760	686
3 lb. 5 oz.—4 lb. 6 oz.	336	318	350	318	249
4 lb. 7 oz.—4 lb. 11 oz.	139	123	119	112	115
5 lb. 0 oz.—5 lb. 8 oz.	80	81	75	70	86
Over 5 lb. 8 oz.	14	13	13	12	12
All weights	29	29	28	26	25

In the Annual Report for 1961 appeared a map showing perinatal mortality in different parts of the County in the three years 1959-61. This analysis has now been extended for a further three years and the results are given in the following table:—

	Perinatal Mortality Rate		
	1959-61	1962-64	1959-64
Colchester M.B.	27	30	29
Tendring (Harwich B., Brightlingsea U., Clacton U., Frinton and Walton U., Wivenhoe U., and Tendring R.)	27	25	26
North Essex (Saffron Walden B., Halstead U., West Mersea U., Halstead R., Lexden and Winstree R., and Saffron Walden R.)	25	27	26
Braintree (Braintree and Bocking U., Witham U., Braintree R., and Dunmow R.)	38	25	31
Chelmsford B.	23	18	20
Maldon (Maldon B., Burnham U., Chelmsford R., and Maldon R.)	27	21	24
Basildon U.	31	28	29
South-East Essex (Benfleet U., Canvey Island U., Rayleigh U., and Rochford R.)	26	25	26
Brentwood U.	23	24	24
Hornchurch U.	29	25	27
Thurrock U.	36	29	32
Harlow U.	30	20	25
Epping (Chigwell U., Epping U., Waltham Holy Cross U., and Epping and Ongar R.)	25	31	28
Chingford B., and Wanstead and Woodford B.	29	23	26
Romford B.	28	31	29
Barking B.	36	27	31
Dagenham B.	34	32	33
Ilford B.	28	25	26
Leyton B.	32	30	31
Walthamstow B.	26	25	25
Administrative County	30	26	28

In the six year period as a whole the Braintree area, Thurrock U., Barking B., Dagenham B., and Leyton B. had perinatal mortality rates of 31 or more but in the first of them the rate was below average in the period 1962-64. The lowest rates were at Chelmsford and the adjacent area from Brentwood to Maldon.

Infant Mortality

There were 570 deaths of infants under one year of age giving an infant mortality rate of 16·4 per 1,000 live births compared with 17·6 in each of the last two years. The following table sets out for the last eight years mortality rates per 1,000 live births in various periods of the first year of life :—

	1957	1958	1959	1960	1961	1962	1963	1964
Early neonatal mortality (first week)	12.0	11.1	12.8	11.9	12.5	11.5	10.9	9.9
Late neonatal mortality (second, third and fourth weeks)	1.7	1.8	1.9	1.8	1.3	1.6	1.6	1.4
Neonatal mortality (first four weeks)	13.7	12.9	14.8	13.7	13.8	13.1	12.5	11.3
Post-neonatal mortality (one month to one year)	5.6	4.8	5.2	5.0	4.7	4.5	5.0	5.1
Infant mortality	19.3	17.7	20.0	18.6	18.5	17.6	17.6	16.4

Mortality during the first week decreased but there was little change during the remainder of the first year. In the six years period 1959-64 mortality after the first week varied from 5·3 per 1,000 live births in Harlow U. and South-East Essex to 7·7 in Barking B., 8·0 in Dagenham B. and 8·1 in Thurrock U.

Mortality of Children

The following table sets out the number of deaths and the death rates of children between 1 and 5 and between 5 and 15 years in the last eight years :—

	Age	1957	1958	1959	1960	1961	1962	1963	1964
Number of deaths	1-4	104	98	103	78	89	97	100	86
	5-14	111	103	107	103	92	87	99	102
Death rate per 1,000 children	1-4	0.99	0.91	0.93	0.67	0.74	0.77	0.78	0.65
	5-14	0.39	0.36	0.37	0.35	0.31	0.31	0.35	0.37

The death rate of children between 1 and 5 declined to better the favourable figure reached in 1960. There has been little change in the mortality of school children over the last eight years and such changes as there have been could well have been due to chance.

Deaths from all causes

The number of deaths registered during the year (after adjustment for inward and outward transfers) was 19,422 compared with 20,628 in 1963 and 19,945 in 1962. The crude death rate was 10·0 per 1,000 population compared with 10·8 in 1963 and 10·5 in 1962 and equals the low rate achieved in 1960.

The adjusted death rate (i.e. the rate comparable with adjusted rates for other areas and with the crude rate for England and Wales) was 11·1 compared with the England and Wales rate of 11·3.

The death rate was lower than in 1963 in all but two of the twelve Health Areas and also in the two districts with delegated powers. When comparison is made with 1960, the death rate in 1964 was higher in the Essex section of Greater London and lower in most other parts of the County. This effect is partly due to changes in the age structure of the populations concerned.

At the foot of Table II on page 109 is shown the number of deaths in each age group in 1964 and each of the previous five years. This shows that there were fewer deaths in 1964 than in 1963 in all adult age groups except men between 35 and 45 and women between 15 and 25 and between 35 and 55. The male increase was associated with an increase in deaths from coronary disease and the female increase with one in deaths from malignant disease.

Tuberculosis Deaths

Deaths from tuberculosis numbered 81 of which 6 were non-respiratory compared with 89 (5 non-respiratory) in 1963 and 109 (10 non-respiratory) in 1962. Deaths from all forms of tuberculosis in the last ten years were as follows :—

Year	MALES						FEMALES					
	0-	25-	45-	65-	75-	Total	0-	25-	45-	65-	75-	Total
1955	7	16	46	33	11	113	7	20	14	6	9	56
1956	1	18	47	28	9	103	2	15	13	5	3	38
1957	1	18	48	23	13	103	2	19	11	8	5	45
1958	4	5	40	28	20	97	5	7	16	9	4	41
1959	1	15	32	25	10	83	2	9	16	3	1	31
1960	—	8	30	33	14	85	1	13	7	10	2	33
1961	1	3	36	16	9	65	3	7	13	7	2	32
1962	1	6	26	27	11	71	—	6	17	4	11	38
1963	—	8	38	19	7	72	—	2	8	1	6	17
1964	1	7	23	20	17	68	1	—	6	3	3	13

There has not been much change in male mortality during the last four years but the great improvement in female mortality achieved in 1963 was maintained.

Cancer Deaths

Deaths from cancer (all sites, including leukaemia) in the County in the last ten years are set out below.

Site	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Stomach	493	492	470	484	532	507	461	527	450	475
Lung & bronchus	653	755	788	751	881	898	935	950	1,042	1,092
Breast	323	338	355	337	368	387	385	376	387	403
Uterus	132	119	113	127	130	138	134	128	128	140
Other sites	1,616	1,631	1,734	1,669	1,736	1,759	1,800	1,925	1,864	1,958
Leukaemia & aleu- kaemia	109	106	86	125	112	121	109	99	103	122
All sites	3,326	3,441	3,546	3,493	3,759	3,810	3,824	4,005	3,974	4,190

After the decrease in 1963, the number of cancer deaths resumed its upward trend in 1964. The number of deaths was at a high level for each site except the stomach, but a large proportion of the increase was due to cancer of the lung. The age distribution of cancer deaths in recent years is given in the following table.

Year	MALES						FEMALES					
	0-	25-	45-	65-	75-	Total	0-	25-	45-	65-	75-	Total
1955	32	97	636	541	405	1,711	28	127	594	426	440	1,615
1956	37	80	719	565	418	1,819	29	113	567	440	473	1,622
1957	26	79	687	610	465	1,867	18	131	626	448	456	1,679
1958	35	72	743	586	461	1,897	23	95	597	447	434	1,596
1959	38	96	814	632	483	2,063	22	102	608	464	500	1,696
1960	24	82	828	649	465	2,048	23	114	593	495	537	1,762
1961	27	96	820	623	512	2,078	26	104	627	498	491	1,746
1962	38	68	861	687	505	2,159	21	114	647	497	567	1,846
1963	43	88	858	696	520	2,205	33	114	579	500	543	1,769
1964	40	105	859	720	532	2,256	23	139	659	513	600	1,934

The decrease in cancer deaths in 1963 was confined to females and most of the increase from 1963 to 1964 was in female deaths, there being more deaths than for many years in every age group and for cancer of the lung, breast and uterus. For males there were increases in deaths of men under 45 and among men over 65 years of age.

Deaths from Diseases of the Circulatory System

The numbers of deaths from diseases of the circulatory system including vascular lesions of the nervous system in the last ten years were as follows:—

Cause	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Vascular lesions of nervous system	2,274	2,460	2,382	2,365	2,426	2,443	2,619	2,699	2,764	2,652
Coronary disease, angina	2,506	2,653	2,794	3,006	3,102	3,270	3,451	3,923	4,045	4,044
Other heart diseases	3,010	3,135	2,904	2,955	2,816	2,609	2,676	2,466	2,381	2,015
Other circulatory diseases	760	795	768	795	836	883	929	902	937	872
TOTAL	8,550	9,043	8,848	9,121	9,180	9,205	9,675	9,990	10,127	9,583

Total deaths in this group which is responsible each year for about half the overall mortality, increased steadily from year to year until 1963, but in 1964 the number fell to a figure lower than in each of the previous three years. The increase was most rapid for coronary disease and there was no decrease in 1964 from deaths ascribed to this cause. On the other hand, the number of deaths from other types of heart disease have decreased over the ten years by one third of the number in 1955. The age distribution of circulatory deaths is as follows:—

Year	MALES						FEMALES					
	0-	25-	45-	65-	75-	Total	0-	25-	45-	65-	75-	Total
1955	8	96	954	1,246	1,769	4,073	14	65	581	1,101	2,716	4,477
1956	9	109	1,039	1,294	1,926	4,377	4	71	573	1,198	2,820	4,666
1957	6	101	1,092	1,287	1,798	4,284	8	67	617	1,150	2,722	4,564
1958	4	88	1,070	1,279	1,909	4,350	5	64	608	1,183	2,911	4,771
1959	12	100	1,116	1,276	1,895	4,399	3	45	583	1,144	3,006	4,781
1960	9	100	1,117	1,279	1,865	4,370	7	58	563	1,146	3,061	4,835
1961	9	117	1,208	1,350	1,967	4,651	9	55	597	1,195	3,168	5,024
1962	7	121	1,242	1,440	2,064	4,874	3	67	611	1,222	3,213	5,116
1963	14	116	1,278	1,429	2,081	4,918	5	47	633	1,272	3,252	5,209
1964	6	123	1,322	1,318	1,824	4,593	9	52	562	1,203	3,164	4,990

The decrease in deaths was greatest for men over 65. All female age groups over 45 showed decreases but deaths of men between 45 and 65 increased; 663 (or almost half) of these were deaths of men between 55 and 65 from coronary disease. This figure compares with 593 in the previous year.

Deaths from Diseases of the Respiratory System

The following table sets out the number of deaths since 1955 ascribed to influenza, pneumonia, bronchitis and other respiratory diseases :—

Cause	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Influenza	80	97	226	93	249	31	181	93	77	26
Pneumonia	883	868	927	970	1,174	1,010	1,206	1,353	1,626	1,177
Bronchitis	893	1,051	910	1,009	968	855	1,092	1,076	1,251	1,038
Other respiratory diseases	168	156	155	175	184	165	169	151	190	162
TOTAL	2,024	2,172	2,218	2,247	2,575	2,061	2,648	2,673	3,144	2,403

Mortality from respiratory diseases (except influenza) was especially heavy in 1963. In 1964, mortality from influenza and pneumonia returned to the level of 1960 but the number of deaths from bronchitis was not far short of the numbers in 1961 and 1962. The age distribution of deaths from respiratory disease in the last five years is given in the following table :—

Age	Males					Females				
	1960	1961	1962	1963	1964	1960	1961	1962	1963	1964
Under 1	44	43	47	53	44	36	34	23	31	34
1—24	21	37	17	25	21	10	19	17	19	16
25—44	20	22	16	18	15	15	25	17	15	14
45—64	233	288	308	334	245	93	121	102	113	81
65—74	372	473	473	498	465	158	227	212	262	189
75 and over	482	674	691	858	642	577	684	750	918	637
All ages	1,172	1,537	1,552	1,786	1,432	889	1,110	1,121	1,358	971

In each year there were more male than female deaths under the age of 75, the difference being especially marked between 45 and 75 years. A large proportion of the extra deaths of these men were due to bronchitis. At all adult age groups the number of deaths in 1964 was less than in each of the last three years. For infants the mortality rate from respiratory disease per 1,000 live births was :

1960	1961	1962	1963	1964
2.65	2.46	2.18	2.50	2.24

Maternal Deaths

There were four maternal deaths giving a maternal mortality rate per 1,000 total births of 0·11 compared with 0·35 in 1963, 0·37 in 1962 and 0·28 in 1961. This is a very satisfactory result.

Accidental deaths and Suicide

The trend in the number of deaths from accidents and suicide in the last ten years is as follows :—

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Motor vehicle accidents	162	167	163	174	193	223	213	215	214	246
Other accidents	273	298	312	308	295	298	289	317	346	362
Suicide	170	214	174	190	173	185	160	176	222	193

Deaths from motor vehicle accidents increased until 1960 and then remained steady but in 1964 there was another substantial increase. Compared with the average for 1961-1963, there was an increase of 23 deaths of men under 65 and an increase of 7 deaths of women between 15 and 24. The number of deaths from other accidents continued to increase. There was some increase in male deaths but the most important factor was an increase of 21 in the deaths of women of over 75 years of age. The number of suicides was less than in 1963, but greater than in all other recent years. The following figures show that the tendency in recent years has been for the number of female suicides to increase and for the number of male suicides to fluctuate considerably from year to year.

	1958	1959	1960	1961	1962	1963	1964
Male suicides	111	90	101	79	80	127	91
Female suicides	79	83	84	81	96	95	102

Morbidity

The number of new claims for sickness benefit received in the 52 weeks ended 29th December, 1964, at local offices of the Ministry of Pensions and National Insurance in the Administrative County was 284,180.

The figures (in thousands) for the last ten years were as follows :—

1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
233.1	235.1	299.4	243.6	278.3	251.5	283.6	289.7	305.6	284.2

After the very high figure in 1963, the number of new claims reverted to the level of 1961 and 1962. The following table gives the average number of claims per week in each quarter of recent years :—

<i>Year</i>	<i>January-March</i>	<i>April-June</i>	<i>July-September</i>	<i>October-December</i>
1958	6,882	3,793	3,173	5,090
1959	9,476	3,779	3,388	5,423
1960	6,287	4,193	3,553	5,477
1961	8,568	4,144	3,534	5,927
1962	8,395	4,760	3,682	5,731
1963	9,567	4,663	3,918	5,738
1964	7,262	4,928	3,978	5,869

New claims to sickness benefit were lower than in most recent years during the March quarter and above average for the remainder of the year.

SECTION II—GENERAL

STAFF

Central Office

Dr. R. D. Pearce, formerly Medical Officer of Health to the Thurrock Urban District Council and Area Medical Officer, South Essex Health Area, was appointed Deputy Medical Officer of Health to take effect on 1st April, 1964, but throughout the remainder of the year, Dr. Pearce continued to act as Medical Officer of Health to the Thurrock Urban District Council in a part-time capacity. Dr. J. Gorman, Medical Officer of Health to the Hornchurch Urban District Council, acted during this time as Area Medical Officer to the South Essex Health Area.

Dr. S. W. G. Caseley was appointed to the vacant post of Principal Medical Officer (Mental Health) on 9th January, 1964. The post had been vacant since December 1962.

Dr. Christine Grant retired from the post of Principal Medical Officer on 5th September, 1964, after 16 years' service with the County Council and nearly 38 years in Local Authority Public Health Services. Dr. Grant was succeeded by Dr. Elizabeth M. Sefton on 7th September, 1964.

Assistant County Medical Officers

Ten Assistant County Medical Officers resigned during 1964 and their posts were filled without undue difficulty.

Other Staff

It was not possible to recruit any more Senior Psychiatric Social Workers during the year despite constant advertising. Four vacancies remained in the establishment of 7 posts at 31st December.

Appointments were made to four further posts of Trainee Mental Welfare Officer of the 12 created in 1963.

By the creation of five additional full-time posts of Health Visitor, a further step was taken towards the completion of the phased programme to achieve a ratio of 1 whole-time Health Visitor for every 4,000 of the population of the County, as envisaged in the County Council's Proposals made under the National Health Service Act, 1946. The five new posts ensured a minimum ratio of one whole-time Health Visitor to every 5,000 population in each Health Area/County District.

Refresher Courses

As in previous years, many different categories of staff attended post-graduate or post-certificate courses, as follows (attendances at Annual Conferences or Study Days are not included):—

Course	Organising Body	Staff Attending
"Administration within the Health Service"	Society of Medical Officers of Health	County Medical Officer of Health
Annual Symposium ...	Ditto.	Deputy County Medical Officer of Health
Course on County Health and Development	Ditto.	1 Assistant County Medical Officer
"Diagnosis and Treatment of the Deaf Child"	Institute of Laryngology and Otology	24 Medical Officers
Seminar in Mental Health	County Borough of West Ham	1 Area Medical Officer, 16 Assistant County Medical Officers, 3 Senior Psychiatric Social Workers
Refresher Course on General Medicine ...	British Post-Graduate Medical Federation	1 Assistant County Medical Officer
Refresher Course in Paediatrics	Ditto	1 Assistant County Medical Officer
Refresher Course in Orthodontics	Ditto	1 Area Dental Officer
Dental Radiography ... Courses	Kodak Limited	17 Dental Officers, 18 Dental Surgery Assistants
Post-Graduate Courses for Dental Officers	British Dental Association	6 Dental Officers
"Administration of Dental Anaesthetics"	Institute of Dental Surgery	3 Dental Officers
"The Prevention of Mental Ill-Health"	Tavistock Institute of Human Relations	11 Superintendent Health Visitors
Refresher Courses for Nursing Staff	Health Visitors Association, Royal College of Nursing, Queen's Institute of District Nursing	4 Non-Medical Supervisors of Midwives/Superintendents of Home Nursing Services, 129 Health Visitors, Midwives and District Nurses
Refresher Course for Day Nursery Nursing Staff	Royal College of Nursing, North-Western Polytechnic, London	51 Nursery Matrons and Deputy Matrons, and Nursery Staff
"Mental Health for Health Visitors"	Severalls Hospital, Colchester	42 Health Visitors
Refresher Course ...	London Foot Hospital ...	10 Chiropodists
Child Guidance Inter-Clinic Conference	National Association for Mental Health	1 Social Worker
Summer School	Association of Public Health Lay Administrators	3 Administrative Officers
"Executive in Action" ...	Metropolitan Education Joint Council	1 Administrative Officer
"Administration and Management"	National Association of Local Government Officers	1 Administrative Officer
"Man in Management"	Metropolitan Education Joint Council	1 Administrative Officer

Transport for Staff

At the end of the year 965 officers, mainly health visitors, midwives and home nurses whose duties necessitate a considerable amount of travelling, were using motor transport as follows in connection with their official duties compared with 930 the previous year :—

County cars	244
(including four 5 cwt. vans, one 10/12 cwt. van and one Utilibrake)	
Private cars, Scooters, Mopeds	721

During the year 35 members of the Department were granted loans under the Council's Assisted Car Purchase Scheme to purchase motor cars for use on County business, compared with 40 in 1963. Five officers purchased the County cars allocated to them and the County Council accepted the balance of one loan taken out by an officer with another local authority when the officer concerned was appointed to the staff of the Health Department, compared with five similar loans the previous year. An amendment to the scheme was made when it was decided that a County car should not be sold to an officer unless it was over a year old.

Medical Examination of Staff

The medical examination of persons selected for appointment, as well as of members of the staff of the County Council, again made heavy demands upon the time of the medical staff. The number of such examinations during 1964 totalled 6,778 (1,401 on behalf of other local authorities) compared with 6,360 the previous year and 5,838 in 1962.

SITES AND BUILDINGS

Health Services Clinics

New clinics were opened at Basildon, Wickford, Harold Wood, Chelmsford (Moulsham Lodge) and Colchester (Monkwick). The rebuilding of the Woodward Clinic, Barking was completed and an extension was added to the Marks Road Clinic, Romford.

A start was made on new clinics at Chelmsford (Springfield Park) and Walthamstow (Hurst Road) and tenders were invited for those at Colchester (High Street) and Hullbridge. Ministry of Health approval was received for the erection of a combined clinic and day nursery at Chadwell Heath and plans were prepared for new clinics at Brentwood, Romford (Chelmsford Avenue) and Walthamstow (Hurst Road). Work commenced on an extension to the Mistley clinic.

A new group practice and clinic centre, built by the Harlow Development Corporation as agents of the Nuffield Provincial Hospital Trust, was opened at Great Parndon, Harlow.

Day Nurseries

A start was made on the erection of new day nurseries at Romford and Barking, the latter being incorporated in a housing scheme being carried out by the Barking Borough Council.

Ambulance Stations

New Ambulance Stations were opened at Ongar and Wickford and a temporary one at Thundersley. A start was made on the erection of a new station at Burnham-on-Crouch and preparations were in hand for projects at Rochford, Billericay and Brentwood.

Hostels for the Mentally Disordered

Hostels for persons recovering from mental illness were opened at Stanway and Romford and a start was made on the adaptation of Harold Wood Hall, Romford (formerly a Children's Home), to accommodate mentally sub-normal persons hitherto under the care of the Welfare Committee.

Housing for Nursing Staff

New houses were completed at Rowhedge and Layer-de-la-Haye and houses were purchased at Hawkwell and Hornchurch, adaptations were carried out to the nurse's house at Hockley to provide two flats and a site was purchased at Lawford.

DECENTRALISATION OF ADMINISTRATION

The arrangements for the decentralisation of the day-to-day running of the local health services (except the Ambulance and Mental Health Services) to 12 Health Area Sub-Committees continued to operate efficiently. A number of conferences of Area Medical Officers were held, when the following matters were discussed, amongst others—admission to day nurseries without charge on medical grounds in certain circumstances, swimming instruction in schools after meals, post-graduate courses for medical staff, the incidence of congenital malformation, the Gillie Report on the future work of the family doctor, the provision of resuscitators for the newborn and the early detection of congenital dislocation of the hip.

LOCAL GOVERNMENT ACT 1958—

DELEGATION OF HEALTH FUNCTIONS

Under the provisions of the Local Government Act 1958, Health functions are delegated to the Colchester Borough Council and the Basildon Urban District Council and these arrangements continued throughout the year.

THE NATIONAL HEALTH SERVICE

JOINT ADVISORY COMMITTEE

The various branches of the National Health Service are represented on the National Health Service Joint Advisory Committee for Essex, the Honorary Secretary of which is the Clerk of the Executive Council for Essex and the Committee met on three occasions during the year. Items discussed included the Maternity Medical Services, obstetric training for general medical practitioners, the appointment of Ambulance Transport Officers at hospitals and the development of the Mental Health Services.

LABORATORY SERVICE

The number of samples dealt with by the Public Health Laboratories was broadly similar to previous years. Their close and invaluable co-operation with Health Departments in the County is gratefully acknowledged.

Nature of Samples (1)	Samples examined by		
	Public Health Laboratories (2)	Counties Public Health Laboratories (3)	
Milk	6,552 (5,510)	174	(179)
Ice cream (including lollies)	1,846 (1,920)	336	(335)
Other Foods	1,024 (669)	302	(247)
Water	1,536 (1,401)	387	(476)
Sewage Effluents	— (—)	69	(93)
Milk churns, bottles, cartons, etc.	781 (826)	—	(—)
Swabbing of equipment	63 (—)	—	(—)

Note : Comparable figures for 1963 are shown in parenthesis.

MILK SUPPLY

Although Essex is not usually considered to be a "dairy" County, there are approximately 29,800 milch cows and 770 milk-producing herds within its boundaries.

Milk (Special Designation) Regulations 1963

Under these Regulations the term "Untreated" replaced "Tuberculin-tested" as the special designation for raw milk as from 1st October, 1964. Seventy-six Licences to use the designation "Untreated" were issued as replacements for "Tuberculin-tested."

No changes were made in the conditions applicable to Licences to use the special designations "Pasteurised" and "Sterilised."

The County Council issued 65 Licences to milk dealers and 21 Licences were cancelled.

At 31st December, 1964, the number of Licences in force was as follows:—

Type of Licence					No. of Licences in force
Dealers (Pasteurised)	...	...	...	...	6
Dealers (Sterilised)	...	...	...	...	2
Dealers (Pre-packed milk)	...	...	...	...	657

	Total	...			665

Weekly inspections were made of the 8 dairies used for pasteurising or sterilising milk. One plant ceased to operate during the year.

In addition to visual inspections of dairy plants and their records, samples are examined to ensure that milk has been pasteurised or sterilised in accordance with the Regulations; washed bottles, milk tankers, and churns are tested bacteriologically to determine the efficiency of cleansing routines. Four hundred and forty-two milk samples were taken from pasteurising and sterilising plants and all passed the prescribed tests.

Modernisation, improvements and expansion are constantly under review or in progress at these plants to cope with increased population and modern techniques.

Co-operation by the trade is generally excellent and conditions satisfactory.

One large dairy in the County supplies milk to American Air Force bases in this country and has to comply with American requirements in addition to our own legislation. One such requirement is that the milk, upon delivery, has to be below 50°F. as well as satisfying bacteriological tests. Delivery temperatures have not been included in British legislation.

Examination of washed bottles and churns (by Colony Counts)

No. of bottles examined	...	...	...	...	214
No. of bottles satisfactory	...	...	...	...	152
No. of bottles fairly satisfactory	...	...	...	...	32
No. of bottles unsatisfactory	...	...	...	...	30

Of 355 churns which were examined by rinse testing, 304 were found to be satisfactory and in accordance with the recognised standard. All unsatisfactory results were investigated.

Milk Sampling

A statistical summary of milk samples taken by the Department follows. Normally, four samples per year are purchased from each dealer who is licensed to sell untreated or pasteurised milk :—

	No. of samples	Type	Appropriate Test	Passed	Failed	Void
Sampling at processing plants	345	Pasteurised (incl. T.T.)	Methylene blue	344	—	1
	97	Sterilised	Phosphatase	345	—	—
Sampling in course of distribution	117	Untreated	Turbidity	97	—	—
	2,142	Pasteurised (including T.T. Pasteurised)	Methylene blue Phosphatase Methylene blue	90 2,138 1,977	19 3 82	8 1 83
	115	Sterilised	Turbidity	115	—	—

Methylene blue test failures usually indicate that milk is not fresh, and are often caused by overstocking or by failure to rotate stock properly. Reasons for all failures were sought and remedies applied where found.

Milk in Schools Scheme

No. of Pasteurised Samples taken	Phosphatase Test		Methylene Blue Test	
	Passed	Failed	Passed	Failed
589	589	—	577	12

Samples of bulk churn milk delivered to kitchens as well as bottled supplies were sampled for bacteriological examination.

Samples are similarly obtained from Children's and Old People's Homes, etc.

Biological examinations of raw milk for :—

(a) Tubercle bacilli—Negative reports were received on 146 samples of milk submitted to biological examination.

(b) Brucellosis—Of 278 milk samples submitted for examination for the presence of *Brucella Abortus*, 274 gave negative results. The District Medical Officers of Health concerned and the Divisional Veterinary Officer of the Ministry of Agriculture, Fisheries and Food were notified of the 4 positive results.

Antibiotics in Milk

Sampling for the presence of penicillin and other antibiotics in milk continued throughout the year. In those cases where raw milk is sold to the public, samples are obtained from the farm, but where milk is to be heat-treated, samples are obtained at the pasteurising dairy prior to heat treatment.

A total of 1,192 samples were obtained, out of which 28 gave readings greater than the recommended maximum. The Milk Marketing Board were advised of these positive results, and their co-operation by investigations at the farms was welcomed.

Cream

Most cream is now pasteurised to improve its keeping quality, but there is no legal requirement to this effect.

There exists a potential health hazard from the sale of unpasteurised cream derived from raw milk and there is, therefore, a case for making compulsory heat treatment legally enforceable and for a bacteriological standard to be established. Licensing of dealers is also desirable.

Ice Cream

There is no statutory bacteriological standard of cleanliness for ice cream, but the methylene blue test provides a simple and valuable method for grading the product and is the principal means of investigating the hygiene of manufacturing, distribution and handling techniques.

Gradings are assessed as follows :—

<i>Provisional Grade</i>	<i>Time taken to reduce methylene blue</i>
1	Fails to reduce in 4 hours
2	2½-4 hours
3	½-2 hours
4	0

Results of Samples

<i>Provisional Grade</i>	<i>No. of Samples</i>	<i>1963 Figures</i>	
1	1,131	62·9%	1,200 72·7%
2	307	17·1%	177 10·7%
3	216	12·0%	154 9·3%
4	144	8·0%	121 7·3%
Total	1,798		1,652

Judgement of a manufacturer's standard of cleanliness should not be based upon one result only, and it is desirable that the majority of samples from any one producer should fall into Grade 1 or 2.

Ice Lollies

E. Coli. Counts are made on water lollies having a p.H. greater than 4·2.

Methylene blue tests are made on ice cream surrounded by ice lollies and plate counts are carried out on lolly creams.

A total of 384 lolly samples were taken, out of which 353 were considered to be satisfactory.

FOOD AND DRUGS ACT, 1955

The Chief Inspector of Weights and Measures has been good enough to provide the following report of the work of his Department during the year.

As a Food and Drugs Authority, the County Council have a duty to take steps to ensure that all food sold within their area of responsibility is of the nature, substance and quality demanded by the purchaser, contains no injurious substances, contains permitted preservatives only in the quantities specified by regulation, is properly labelled, and meets statutory standards as to composition where such are prescribed.

The Weights and Measures Department—which operates under the direction of the Public Protection Committee of the County Council—is responsible for practical administration and enforcement of the statutory provisions, and during the year, 981 samples of milk and 527 samples of other foodstuffs and drugs were procured for analysis. Most of the samples of milk were tested for quality in the Department's own laboratory, and where samples were found to be of poor quality or adulterated with water, follow-up samples were submitted to the Public Analysts. Most of the other samples were submitted to the Public Analysts for analysis and report.

Twenty-three samples of milk were found upon analysis to be unsatisfactory and each was the subject of appropriate action.

One farmer, prosecuted for selling milk containing added water, was fined £20 and ordered to pay costs of £10 14s. 6d. Another, charged with similar offences, claimed that the adulteration occurred through an intermittent leak of water from an in-churn cooler; he was conditionally discharged but ordered to pay costs of £14 2s. 0d.

Twenty-one samples of foodstuffs other than milk were the subject of adverse reports of which details are as follows:—

Bread

This sample was submitted as a result of a complaint that the bread contained rodent excreta. The Public Analysts reported that the loaf contained two blackish pellets of charred dough containing traces of iron. No evidence of excreta was obtained.

Cheese

A sample of cheese which was submitted following a complaint that it had a hot taste and caused a swelling of the lips when eaten, was found to contain 2% of lactic acid.

Lactic acid is natural to cheese but the proportion found in this sample was higher than is normal.

Chopped Pork

A small sliver of white metal which had been found by the purchaser when the contents of a can of chopped pork was being sliced, was found to consist mainly of magnesium. Microscopical examination of the sliver showed traces of a greyish deposit firmly adhering to it and this was found to consist mainly of a starchy material. It was not found possible to establish beyond reasonable doubt that the contamination had not occurred after the can was opened.

Corned Beef

A 1½-in. wire nail which was alleged to have been found in a can of corned beef was submitted to the Public Analysts for examination together with a piece of the corned beef. The Analysts expressed the opinion that the condition of the nail and the small piece of corned beef were compatible with the nail having been

embedded in the corned beef at the time of manufacture, but in the case of this sample also, evidence as to whether the nail was embedded in the meat at the time of sale was inconclusive and the matter was dealt with by drawing the canners' attention to what had been found.

Crisps

A complaint was received which alleged that a child who had purchased a packet of potato crisps had found a black, round object approximately $\frac{3}{4}$ in. in diameter, in the packet. Examination showed this object to consist of a small potato which had been saturated in oil and cooked, but which was, in fact, harmless.

Dietary Food Supplement

Two samples of a Dietary Food Supplement were found to be unsatisfactory. One of the samples was unsatisfactory in respect of its content of vitamins, while the vitamins in the other were incorrectly designated. After representations were made to the distributors it was discovered that uneven distribution of the vitamin content was responsible in each case for the apparent deficiencies.

Foreign Matter found in Flour

As a result of a complaint received from a school kitchen a sample was taken from flour which was being used there and which was found to be contaminated with fragments of biscuit and violet-coloured particles. Upon analysis the latter were found to consist of the violet dye Methyl Violet 5B. The Public Analysts were unable to offer any explanation for their presence, except that they may have formed a rodent bait, however, the Analysts were unable to detect any poison of any kind in the fragments. The presence of the foreign matter remained an unsolved mystery.

Hamburger Roll

A canned meat product sold under the description of "Hamburger Roll" was found to contain only 61% of meat whereas, in the Analysts' opinion, a product of this description should contain at least 65% of meat.

Since the end of the report year, I have been afforded the opportunity of making observations on Draft Regulations which, if they are made, would set standards of meat content for all canned meat products.

Ice Cream

A sample of ice cream was found to contain only 4.1% of fat instead of the minimum of 5% required by the Food Standards (Ice Cream) Regulations. The ice-cream was therefore deficient in fat to the extent of 18% of the minimum quantity prescribed and the seller was prosecuted. This was a second offence and the Court imposed a fine of £15 and awarded costs of £4 8s. 6d.

Liqueur Honey

A sample described as "Liqueur Honey" was found on analysis to contain only 0.12% of alcohol (proof spirit). The descriptive matter on the jar in which this article was sold declared that a liqueur had been used in the preparation of this honey and that the honey contained "not more than 0.2% of alcohol." The Public Analysts expressed the opinion that the description "Liqueur Honey" was inappropriate for a product which contained only an insignificant amount of alcohol.

After representations to the manufacturers, the labels were amended and the alcohol content increased.

Full Cream Milk Crystals

This sample consisted of a Full Cream Milk Powder in accord with the regulations but the container in which it was sold did not comply with these regulations which required such a container to bear a statement showing the number of pints of liquid milk to which the contents are equivalent when reconstituted.

Peach Halves

Two samples of peach halves were found on examination to consist not of half fruits but of slices, and attention was drawn to the incorrect labelling.

Rice Breakfast Food

A vitamin enriched breakfast cereal food was found to be deficient in the declared content of Vitamin B₁, but further samples taken were found satisfactory in this respect.

Roll and Butter

Test purchases of "rolls and butter" were made at a café after a complaint was received from a customer. An analysis of the fat on the rolls showed that it consisted not of butter but margarine. The proprietor was prosecuted, was fined £10 and ordered to pay £4 8s. 6d. costs.

Sausages

The Preservative in Food Regulations allow both beef and pork sausages to be preserved with sulphur dioxide to the extent of 450 parts per million, always provided that a declaration of preservation is given at the time of sale.

A sample of beef sausages and one of pork sausages were found to be preserved with sulphur dioxide to the extent of 300 and 290 parts per million respectively but no declaration of preservation was given at the time of sale. Proceedings were instituted against the butcher, who was fined £4 and ordered to pay £2 2s. 0d. costs.

One sample of pork sausages had a meat content of 56% whereas the Public Analysts were firmly of the opinion that pork sausages should contain at least 65% of meat. Draft Regulations, on which I have been afforded the opportunity of making observations, are at present under consideration by the Minister and if introduced would support the opinion of the Public Analysts that pork sausages should contain not less than 65% of meat.

Pork Sausage Meat

A sample of pork sausage meat which was supplied in fulfilment of a County contract, which required that it should contain not less than 65% of meat and that not more than 33½% of the total meat should consist of fat, failed to meet these requirements. Analysis showed a total meat content of 61% of meat of which 24% was fat.

Shredded Suet

An informal sample of this commodity taken from a partially used packet at a school kitchen, was found to be deficient in fat contrary to the Food Standards (Suet) Order, but a follow-up sample taken from the same source proved to be genuine.

Other articles the subject of complaint

A purchaser alleged that a piece of glass had become embedded in the roof of his mouth whilst eating salmon, which had been purchased in a tin. The substance thought to be glass was found by the Public Analysts to be struvite, which sometimes occurs in canned salmon being due to an interaction of elements naturally occurring in this fish.

Another complaint received from a member of the public concerned a small piece of steel wire reported to have been found embedded in a loaf of bread. Whilst it did not prove possible to trace the source of this foreign body in the food, the serious investigation carried out no doubt impressed on those concerned the need for the utmost care in the preparation of food for human consumption.

WATER SUPPLIES

Water at the turn of a tap is only one of many things which the public has come to take for granted in this modern age. While the great necessity for water is appreciated, there is little or no thought given to the organisation behind that supply or the difficulties encountered in maintaining it. Water is used extravagantly and in countless cases is allowed to run to waste as if the sources were inexhaustible.

Essex, which is one of the driest parts of England, has no great rivers to bring water from elsewhere and underground supplies are diminishing. Against this background a large population augmented by immigration from the nearby metropolis and elsewhere continues to expand, with development spreading slowly over its fertile acres. Information received from the statutory water undertakers tells its own story. Water consumption in Essex (excluding the area of supply of the Metropolitan Water Board) has risen from 41,568,000,000 gallons in 1946 to 80,390,000,000 gallons in 1964; an increase of 38,822,000,000 gallons and 3,189,000,000 over the figure for the previous year.

In 1964, the rainfall recorded at Langford Waterworks was only 18·25 inches. This was below the annual average owing to the unusually low rainfall of the last six months of the year. Reflective of reduced river flows reservoir levels fell ominously and long before the end of the year the supply position was the cause of growing concern on the part of the main water undertakings and the County Council.

Deep underground waters which form an important source of supply to water undertakers may also be tapped by farming and industrial concerns who, indeed, already make heavy demands, and it is felt that all applications made to the Minister call for careful consideration. During 1964, twelve applications coming to the Council's notice were investigated, five being objected to by the County Council and the statutory water undertakings concerned. For some years it has been the County Council's policy to object to any appreciable abstraction where there is the slightest possibility of a source of public water supply being affected. Two public enquiries were held at which evidence was given on behalf of the Health Department.

Particulars of applications made and licences granted during the year in respect of the abstraction of underground water are given in the table on page 37.

In the north-east of the County, the Tendring Hundred Waterworks Company had in hand the construction of the first of four boreholes and trunk main laying, having in mind, in view of the continued acceleration of development in the area of supply, the necessity of these facilities being brought into production in time to meet the summer peak of 1965. This is part of works on the Suffolk side of the River Stour, intended to augment the Company's existing supply by about two million gallons per day, in pursuance

of the Tendring Hundred (New Sources) Order, 1963. At the same time a scheme for providing impounding storage reservoirs in the Salary Brook and Bourne Brook valleys in the catchment area of the River Colne was being investigated and, in conjunction with the Colchester and District Water Board, additional sources outside the Stour Valley catchment area were being sought.

In the west the Lee Valley Water Company applied to the Minister of Housing and Local Government for an Order under the Water Act, 1945, which will authorise an increased abstraction from the Company's existing source at Roydon. A new water tower was completed at Toothill and planning consent obtained for another at Kelvedon Hatch. Important aspects of a scheme in hand to improve water supply arrangements at Saffron Walden include the construction of a two million gallon reservoir and a water tower of 150,000 gallons capacity. A question of concern to the Lee Valley Water Company is the possible development of Stansted to form a new town of 100,000 people.

In the south the Chigwell Row Works progressed according to plan. When completed the works will enable the South Essex Waterworks Company to obtain and treat raw Thames River water obtained from the Metropolitan Water Board. The last mentioned Undertaking has agreed, in principle, to supply an amount of water increasing from an agreed 5 m.g.d. to an eventual 20 m.g.d., subject to the water being available. Two-fifths of this quantity, by agreement, will be passed to the Southend Waterworks Company.

At the commencement of the scheme it was realised that it would not be possible to have the whole range of treatment in operation by the 1st April, 1965; consequently maximum effort was concentrated on the slow sand filters as these, when operated at a lower rate, give sufficient treatment to produce a very satisfactory supply.

The programme envisages the treatment capacity being available for over 5 m.g.d. in April, and there was every indication at the end of December 1964, that this would be achieved. The associated 11 miles of pipeline and 20 m.g. covered reservoirs at Romford were well advanced and will also be completed in good time. The Metropolitan Water Board are arranging temporary pumping facilities at the Chingford end to ensure that the supply will be forthcoming.

The Minister of Housing and Local Government's policy of re-grouping, has already led to the absorption of several of the smaller undertakings by larger concerns, such as the Lee Valley Water Company and the Tendring Hundred Waterworks Company, or their amalgamation into a new corporate body such as the Colchester Water Board. As from the 1st October, 1964, the water undertaking of the Brightlingsea Urban District Council, until then the only remaining small water undertaking in the Tendring peninsula remaining independent, was transferred to the Tendring Hundred Waterworks Company. On the other hand, in 1963, a Bill which would have had the effect of amalgamating the South Essex Waterworks Company and the Southend

Waterworks Company, together with the smaller undertakings of the Chelmsford and Maldon Borough Councils, the Urban District Council of Burnham-on-Crouch and the Rural District Councils of Chelmsford and Maldon into one Company to be called the Essex Water Company had failed. The Minister has, however, stated his opinion that such a scheme of re-grouping is desirable and after holding consultations with the other undertakers concerned, the South Essex Waterworks Company took steps towards submitting to the Minister an application for an Order under Section 9(1) of the Water Act, 1945, that this aim might yet be achieved. The Minister has also stated in regard to the water undertakings of the Braintree and Halstead Rural District Councils, the Braintree and Bocking Urban District Council and the Halstead Urban District Council, that he feels they should be re-grouped together and in present circumstances be incorporated into the Colchester Water Board.

The Water Resources Act, 1963, provides for the establishment of a Water Resources Board and River Authorities. The duties of the Board will be to consider the action necessary for conserving, re-distributing or otherwise augmenting water resources and to report to the Minister. Extensive duties fall on the River Authorities including that of making a survey and report upon present and future demands in their respective areas and making proposals to meet the situation. Among their powers is that of demanding information from any one abstracting water or discharging effluent and of administering a system of licensing and abstraction.

The River Authorities assumed their functions on 1st April, 1965. As regards the growing demands on existing water resources in Essex, they face a difficult task.

The recently published South-East Study, a survey carried out by the Ministry of Housing and Local Government, provides food for thought. It examines the housing and land use problems of Greater London and South-East England during the next 17-18 years and envisages an increase in population of $3\frac{1}{2}$ million by 1981, at which time it states the water demand in England and Wales as a whole may have increased from the present 50·4 gallons per head per day, to 65 gallons per head per day, such figures including both domestic and trade supplies.

Water supplies in South-East England are duly considered in the Report. The importance of the Thames Basin for the supply of water in the region is recognised and it is stated that on present estimates it may be that the flow in the Thames will have to be augmented by bringing water from other catchments in the west.

In like manner, to meet the large development expected in the Lee Basin area, supplies may be augmented by importation of ground and surface water from the Great Ouse Basins and by water from the Thames catchment. In the north, it is from Suffolk and East Anglia that additional water may have to come.

RURAL WATER SUPPLIES AND SEWERAGE

The policy of the County Council has always been to encourage Rural District Councils to lay water mains and sewer their districts where possible. Approved schemes attract financial contributions from the County Council and the Ministry of Housing and Local Government under the provisions of the Rural Water Supplies and Sewerage Acts, 1944/61. In this connection grants paid to County District Councils for the financial year ended 31st March, 1964, totalled £82,350. The estimated grant for 1964/65 is £100,000.

Sewage treatment works, towards the cost of which the County Council contribute, are inspected annually. During 1964, such sewage treatment plants in nine Rural Districts were inspected and in each instance maintenance was found to be satisfactory.

During the year the following schemes were submitted for grant purposes and for the County Council's observations prior to the District Council's applications to the Ministry of Housing and Local Government:—

Sewerage and Sewage Disposal

District	Scheme	Cost £
Colchester Borough	Sewer Extension, Boxted Road, Colchester	305
Braintree Rural	Gt. Saling and Shalford S. & S.D.	97,900
Chelmsford Rural	Runwell Sewer extensions	1,265
	Woodham Ferrers S. & S.D.	155,000
Dunmow Rural	Leaden Roding and Margaret Roding S. & S.D.	64,650
	Lower Chelmer Valley S.	270,300
Epping & Ongar Rural	Roydon, Sewerage	9,350
Halstead Rural	Foxearth S. & S.D.	44,000
Lexden and Winstree	Chappel Hill Sewer extension	3,110
Rural		
	Hardy's Green, Birch Sewer Extension	13,600
	Salcott and Virley S. & S.D.	32,640
Maldon Rural	Southminster Sewer extensions	1,800
Tendring Rural	St. Osyth Sewerage and S.D. (revised .. and extended)	294,317
	West Area Sewerage Scheme, Sewer .. extension, Sturricks Lane, Gt. Bentley	8,285
	West Area Sewerage Scheme, extension to Oatlands and Wheatlands	3,824

Water Supplies

<i>District</i>	<i>Scheme</i>	<i>Cost £</i>
Colchester & District Water Board	Water Main Extension, Daisy Green, Eight Ash Green	925
	Extension to Church Lane, Little Tey	300
	Extension to Chapel Lane, Tiptree	530
	Extensions to Gardenfield Cottages, Boxted	305
Maldon Rural	Water Main extension Station Road, Wickham Bishops	1,185

Ministerial inquiries or investigations were held by Inspectors of the Ministry of Housing and Local Government concerning the following sewerage schemes at which the County Council were represented by the County Health Inspector or an Assistant County Health Inspector :—

<i>District</i>	<i>Scheme</i>
Saffron Walden Rural ...	Littlebury Great Chesterford Debden and Newport
Maldon Rural	Bradwell-on-Sea Southminster Latchingdon, Mundon, Cold Norton and Stow Maries Althorne, Mayland and Maylandsea Tolleshunt D'Arcy
Dunmow Rural	Leaden Roding and Margaret Roding Takeley (Sewage Works Extension) Lower Chelmer Valley Scheme
Halstead Rural	Foxearth

In addition, one enquiry concerned extensions to the Witham sewage works ; and Brain Valley outfall sewers, and another the provision of water towers in the Halstead Rural District.

Lack of uniformity in progress made by Rural District Councils has been apparent for some time in the matter of the provision of sewerage schemes. Thus while the majority of villagers in rural districts have the benefit of main drainage, in other areas comparatively large communities are still without such amenities. There are, however, signs of better advance being made in the less progressive localities.

Particulars of schemes completed during 1964, works under construction, and schemes anticipated to be executed in the near future are given in Table on page 117.

County Council Sewage Disposal Works

Ninety-six visits were paid to disposal works owned by the County Council. These serve schools, residential establishments, etc.

Fifty-five samples of treated effluents were obtained, of which 35 complied with the standard suggested by the Royal Commission on Sewage Disposal. All results are notified to the County Architect together with any necessary observations regarding the works. Servicing is carried out by a mobile squad controlled by the County Architect, an arrangement which has proved to be very satisfactory.

REFUSE DISPOSAL

There were 46 refuse tips receiving domestic and/or trade waste conveyed from other districts. Such tips are controlled under the Essex County Council Act, 1933. A total of 598 inspections were made. Many of the tips in and around Hornchurch and Dagenham are reaching an advanced stage of reclamation, and refuse from the metropolis will have to be transported ever greater distances upon their completion.

It became necessary to institute court proceedings in respect of one tip. Following conviction, conditions improved considerably.

Increased quantities of liquid trade wastes require disposal. When considered to be safe, these are being deposited in the larger tips on the Thames marshes. Small excavations are made in the completed and decomposed areas of the tips to receive the wastes and are then covered. To date this method has proved satisfactory.

The whole question of the disposal of chemical and toxic wastes is being considered by a Committee set up by the Ministry of Housing and Local Government with the following terms of reference :—

“To consider present methods of disposal of solid and semi-solid toxic wastes from the chemical and allied industries, to examine suggestions for improvement and to advise what, if any, changes are desirable in current practice, in the facilities available for disposal, and in control arrangements, in order to ensure that such wastes are disposed of safely and without risk of polluting water supplies and rivers.”

The County Health Inspector was invited and agreed to serve on this Committee. It is unlikely that the Committee's report will be available for some time owing to the vast amount of research which will be needed.

Planning controls regulated methods of disposal at 70 other tips and 169 inspections were made. Informal action was taken to remedy any unsatisfactory conditions. Constant vigilance becomes increasingly important as building development in the County increases, bringing not only greater quantities of refuse but also residential estates within closer proximity of tips. The lighter consistency of the refuse and labour difficulties also produce problems.

RURAL HOUSING

During the year extensive development continued in office, industrial and housing fields despite a growing shortage of building materials, notably bricks and plaster board. Villages as well as towns are expanding as never before.

Returns received from the Rural District Councils in Essex indicate an increase in local authority building over the total for 1963 (but not 1962) and a general increase in private enterprise development in continuation of the trend during recent years. Notwithstanding this progress, however, and the numbers of local authority houses which were relet during the year, there is a marked upward trend in the total number of applicants on Council house waiting lists in urgent need of housing accommodation. It appears paradoxical that in districts where the most houses have been erected the numbers of persons in urgent housing need have actually increased.

The influence of the booming towns of Chelmsford, Colchester and Southend-on-Sea is reflected in development in the adjoining Rural Districts of Chelmsford, Lexden and Winstree and Rochford.

As is to be expected, the number of unfit houses demolished has decreased steadily during recent years, as also the numbers of houses closed, the Halstead Rural District Council being most active in the former aspect of housing and the Saffron Walden Rural District Council in the latter, during the year. On these points it should be remembered that the antiquity and architectural interest of a building are among factors to be taken into account when deciding the fate of a dwelling, many such dwellings being more prominent in some areas than others.

In some cases it is still necessary to invoke formal action to effect the repair of dwellings. Had it not been for the comparatively large total (34) rendered fit in this way by the Chelmsford Rural District Council the total would have been much less than in 1963. Informal action is still generally most effective in remedying housing defects, the largest individual total being in the area of the Lexden and Winstree Rural District Council.

By circular 11/65 the Ministry of Housing and Local Government asked for revised figures of the number of houses remaining unfit for human habitation, irrespective of the number of years it will take to re-house the occupants. Previously estimates were related to a five-year plan beginning in 1955. Thus the new assessment would account for some of the figures in columns (b) and (c) of Table VII, Rural Housing on page 114, rising sharply as in the case of the Tendring Rural District Council. In the case of the Dunmow Rural District Council the estimated number of unfit houses has risen to a like extent but with only one year considered necessary for dealing with them. Some have changed much less; the Rochford Rural District Council's estimates in this connection being nil. The Maldon Rural District Council after nine years still claim that they require 5 years in which to complete their

programme. There are other authorities who adhere to their previous estimates or have lengthened them. Thus there appears to be variation of progress as between one authority and another, and the end of each one's programme, whatever the reasons, seems to remain year by year tantalisingly out of reach.

The Government is anxious that local authorities should make good use of the grant provisions of the Housing (Financial Provisions) Act, 1958, and the House Purchase and Housing Act, 1959, to encourage house owners to improve their properties. The extent of house improvement effected during the year by these means is shown in Table VIII on page 115. In nearly every case there were increased totals. The highest amounts paid under the Housing (Financial Provisions) Act, 1958, have been expended by the Chelmsford Rural District Council and, in the case of the House Purchase and Housing Act, 1959, by the Tendring Rural District Council. While much has been achieved by these means, which are voluntary on the part of house owners, despite a building industry more and more preoccupied with large projects of development, and an unknown number of houses which have been improved by owner-occupiers without recourse to grant, many tenanted houses worthy of improvement remain. Undoubtedly, however, the housing standard of the country dweller has, on the whole, improved considerably during recent years.

There is no doubt that housing will remain a major focus of national interest for a long time to come. Rural populations will continue to grow, immigrant problems will not remain in the towns, and there are villages already assuming urban characteristics.

Atmospheric Pollution

The Clean Air Act 1956, is administered by District Councils and by the Alkali Inspectorate.

In co-operation with the Department of Scientific and Industrial Research, the extent of pollution in the County from London and other large centres is being measured.

Reflectometer readings of smoke stains are carried out by staff of the Department on behalf of seven local authorities, who have provided stations to measure air pollution by smoke and sulphur dioxide.

Establishments for Massage or Special Treatment

A total of 322 inspections were made of premises licensed under the Essex County Council Act 1933. Conditions generally were found to be very satisfactory.

Eight new licences were granted, 102 licences renewed and four licences issued for transfer of premises.

SECTION III—THE CARE OF MOTHERS AND YOUNG CHILDREN

Child Welfare Centres

At the end of 1964 the County Council were providing 277 Child Welfare Centres at which 544,026 attendances were made throughout the year. During the year, 13 new Centres were started and 16 discontinued, as follows:—

<i>New Centres started</i>	<i>Centres discontinued</i>
Health Services Clinic, Monkwick Estate, Colchester	Blackheath Baptist Hut, Mersea Road, Colchester
Methodist Room, Wix	Congregational School Room, Wix
St. Andrews Hall, Stanway	St. Albright's Mission Hall, Stanway
Health Services Clinic, Moulsham Lodge Estate, Chelmsford	Methodist Church Hall, Moulsham Lodge Estate, Chelmsford
Health Services Clinic, Market Road, Wickford	Village Hall, Toot Hill
Health Services Clinic, Great Oaks, Basildon	17 Nevendon Road, Wickford
Village Hall, Bulphan	119-123 Honeypot Lane, Basildon
Health Services Clinic, Gubbins Lane, Harold Wood	Kingswood Baptist Church Hall, Basildon
St. Giles Hall, Nazeing	Community Hall, Vange
Health Services Clinic, Madeira Grove, Woodford Green	The Hut, Foulness Island
Bower Hall, Havering	Little Warley and Childerditch
Congregational Church, Chaucer Road, Romford	Primary School
Julia Engwell Clinic, Woodward Road, Barking	61 Athelstan Road, Harold Wood
	Congregational Church Hall, Nazeing
	St. Barnabas Church Hall, Woodford Green
	Village Hall, Matching
	Danson Infants' School, Ellerton Road, Dagenham

Distribution of Welfare Foods

Welfare Foods were being distributed at 428 Centres in the Administrative County during 1964, this being 12 more than in the previous year. 188 of these Distribution Centres were in Health Services Clinics and 240 in various other premises. The following list indicates the quantities of Welfare Foods, including National Dried Milk, distributed to beneficiaries during 1964, with comparative figures for 1963:—

		1963	1964
Orange Juice and Vitamin C (bottles)	...	543,606	626,798
Vitamin A and D tablets (packets)	...	51,537	51,379
Cod Liver Oil (Vitamin A and D) (bottles)	...	42,723	44,146
National Dried Milk (tins)	...	368,777	379,227

Medicaments and Nutriments

The supply of approved medicaments free of charge and the sale of nutriments at reduced prices, to mothers and young children attending Child Welfare Centres, continued throughout the year. In view of the great variety of brands of similar types of nutrient being sold within the Administrative County, consideration was given to the question of limiting the varieties to be sold. In view of the complexity of the problem the matter was still under review at the end of the year.

Dental Inspection and Treatment

The report of the Chief Dental Officer on the work of the County Dental Service appears on page 92. The following table, however, gives details of dental treatment provided for expectant and nursing mothers and young children during 1964, with comparable figures for 1963 :—

	Expectant and Nursing Mothers		Children under five years of age	
	1963	1964	1963	1964
Number examined	1,029	1,230	4,004	4,757
Number who commenced treatment	848	914	2,418	2,911
Courses of treatment completed	652	699	1,952	2,243
Dental Treatment provided:				
Scalings and gum treatment	709	749	88	109
Fillings	1,955	1,946	4,215	4,279
Silver Nitrate treatment	42	14	1,305	1,114
Crowns and Inlays	24	16	—	—
Extractions	981	674	1,500	1,602
General Anaesthetics	136	130	674	784
Dentures provided :—				
Full upper and lower	58	82	—	—
Partial upper and lower	90	92	—	—
Radiographs	164	197	46	57

Detection and Treatment of Phenylpyruvic Oligophrenia

The arrangements for the detection and treatment of phenylpyruvic oligophrenia continued during 1964, and appropriate tests were carried out on the urine of 39,004 children (8,782 more than in 1963). No case was found to have a positive reaction.

Day Nurseries

During 1964 the County Council provided 20 day nurseries, 13 of which were approved for the training of nursery nurses, with total accommodation for 956 children. During the year the total average daily attendance at all day nurseries throughout the Administrative County was 767.

Daily Guardians Scheme

At the end of 1964, the numbers of registered daily minders and of children being cared for were as follows :—

<i>Health Area</i>	<i>Daily Guardians</i>	<i>Children being cared for</i>
Forest	1 (1)	1 (1)
Dagenham	24 (42)	26 (24)
Walthamstow	18 (7)	4 (3)
South-East Essex ...	7 (4)	4 (2)
	<hr/>	<hr/>
	50 (54)	35 (30)
	<hr/>	<hr/>

Note : The figures in parenthesis relate to 1963.

Nurseries and Child Minders Regulation Act, 1948

The numbers of premises and child minders registered by the County Council in accordance with the requirements of the Nurseries and Child Minders Regulations Act, 1948 and the number for whom provisions was being made at the end of 1964, together with comparable figures for 1963, are shown below :—

Health Area/ Delegatee Authority	NURSERIES				CHILD MINDERS			
	Number Registered		Number of Children Provided for		Number Registered		Number of Children Provided for	
	1963	1964	1963	1964	1963	1964	1963	1964
North-East Essex	3	4	41	68	11	15	96	116
Mid-Essex	12	23	221	423	24	27	216	231
South-East Essex	8	6	96	100	15	17	94	127
South Essex	22	28	666	920	15	20	150	107
Forest	18	24	436	667	9	20	43	31
Romford	4	5	142	199	4	3	12	14
Barking	—	—	—	—	—	2	—	6
Dagenham	—	1	—	50	3	3	20	20
Ilford	18	23	844	983	13	14	74	74
Leyton	—	1	—	30	3	5	12	19
Walthamstow	2	2	56	56	2	2	27	20
Harlow	7	9	181	266	11	13	56	75
Basildon U.D.C.	4	8	75	150	11	9	75	217
Colchester M.B.C.....	3	6	105	171	2	4	10	26
TOTAL	101	140	2,863	4,083	123	154	885	1,083

Child Guidance

In previous reports, reference has been made to Ministry of Health Circular 3/59 dated 10th March, 1959, and to the suggested arrangements for Child Guidance Teams to advise staff at Child Welfare Centres on any problems of emotional development or behaviour difficulties found in mothers and young children attending the Clinics. Owing to the continued shortage of Psychiatrists however, it was not possible to commence these arrangements during 1964, but the question is still receiving consideration.

The usual co-operation between Clinic staff and the staff of the Child Guidance Service continued throughout the year and in February the Health Committee gave approval to arrangements being made with the Romford Child Guidance Clinic for a few children of pre-school age being accommodated at the Day Nursery in Western Road, Romford from 2.30—3.30 on Friday afternoons free of charge whilst the mothers accompanied older children to the Child Guidance Clinic.

Convalescent Treatment

Recuperative holidays in accordance with arrangements made under Section 22 of the National Health Service Act, 1946, were arranged for twenty-six mothers and fifty young children during the year.

Kingsley Hall Day Centre for Handicapped Children, Dagenham

I am indebted to Dr. J. Adrian Gillet, Area Medical Officer for Dagenham, who has prepared the following report on the work carried out at the Centre during the year :—

“ The work of the Centre continued as outlined in my report last year, and 1964 was another busy year.

During the year 12 new cases were admitted and 15 children were discharged. There were 20 children on the roll at the end of the year.

The admissions were as follows :—

Case	1	...	Paraplegia—retarded
	2	...	Mongol
	3	...	Twins—retarded
	4	...	—social maladjustment
	5	...	Mongol
	6	...	Still's disease
	7	...	Maladjusted
	8	...	Congenital heart disease
	9	...	Congenital cataract—partially sighted
	10	...	Retarded—maladjusted
	11	...	Microcephalic—athetoid
	12	...	Quadriplegia—mentally retarded

Of the 15 children discharged, 6 were able to commence attendance at an ordinary school, 3 were placed in special schools, 2 went into mental hospitals, 2 were discharged to home care, 1 was admitted to a training centre and 1 left the district.

An important task of the Centre staff is the accompanying of children on visits to hospital, and 84 such visits were made during the year.

Work was in progress at the end of the year to provide much needed additional storage accommodation, and a platform for the swimming pool so that it can be used indoors during the winter.

Despite staff shortages, a very high standard of care for each child was maintained during the year."

Child Development Sessions

As mentioned in my previous report the further extension of Child Development Sessions throughout the Administrative County continued and by the end of the year sessions were operating as follows :—

Health Area	Clinic	Sessions per week
South-East	Great Wakering	2
Harlow	Lister House	2
	Sydenham House	2
Barking	Northbury Infants' School	2
	Thames View	2
Leyton	Granleigh Road	3
	Leyton Green	2
	Dawlish Road	2
Walthamstow	West Avenue	2
Basildon	Great Oaks	2

These Child Development Sessions which are providing a most useful service are increasing in popularity and it is anticipated that further extensions of these facilities will be required in the future.

Boarded-out Children

The arrangements for the medical examination of boarded-out children continued during the year and a total of 1,141 children were examined. Of this total, 311 were found to have various defects requiring observation or treatment and the Area Medical Officer concerned was informed in each case so that any appropriate action might be taken. General medical practitioners undertook the majority of these examinations, the remainder being undertaken by the County Council's medical staff.

Notification of Congenital Defects Apparent at Birth

On 1st January, 1964, the Ministry of Health introduced a scheme for the reporting of all congenital defects which are apparent at birth and the subsequent transmission of this information to the Registrar General.

The scheme rests on information being sent to the Medical Officer of Health by the doctor or midwife notifying a birth, as required by Section 204 of the Public Health Act, 1936, of any malformation of the child, whether live, or still-born, observable at the time of birth, described as accurately as possible at the time.

It was considered that the most expedient means of obtaining this information was to include a reference on the notification of birth form which would indicate whether any malformation was apparent in order that a follow-up visit could be made by a Health Visitor to elicit further detailed information.

This system, which necessitated altering the notification of birth into the form of a sealed letter card has proved satisfactory and during the year some 475 notifications of congenital defects apparent at birth were received.

SECTION IV—THE MIDWIFERY, HOME NURSING AND HEALTH VISITING SERVICES

Midwifery Service

The following table gives details of the number of midwives who notified their intention to practise in accordance with the provisions of the Midwives Act, 1951 :—

<i>Form of practice</i>	<i>Domiciliary Midwives</i>	<i>Midwives in Institutions</i>	<i>Total</i>
(a) Domiciliary Midwives employed by the Authority	306	—	306
Domiciliary Midwives employed by Hospital Management Committees	2	—	2
(b) Midwives in private practice (including those employed in nursing homes)	—	30	30
TOTAL	308	30	338

During the year 11,659 confinements were attended by Domiciliary Midwives employed by the County Council and in all except 195 of these a doctor was booked for the confinement.

In 1964, 35,277 births were notified, 1,278 more than the previous year, and of these 23,061 related to infants born in hospital. The percentage of births which took place in hospital was 65·4 compared with 63·4 in 1963. From the following figures it will be seen that the percentage of births in hospital varies considerably throughout the County :—

		1964	1963
		%	%
Colchester M.B.	...	75·6	74·3
North-East Essex	...	80·2	78·9
Mid-Essex	...	68·3	66·7
Basildon U.D.	...	53·9	48·8
South-East Essex	...	46·8	46·5
South Essex	...	56·7	56·3
Harlow	...	54·4	49·1
Forest	...	68·3	66·4
Romford	...	61·6	59·7
Barking	...	72·4	72·0
Dagenham	...	65·5	63·9
Ilford	...	75·6	73·6
Leyton	...	78·4	76·4
Walthamstow	...	70·5	69·8

Recruitment Publicity for Midwifery Staff

During the year the County Council were associated with a National campaign sponsored by the Ministry of Health involving various publicity measures aimed at stimulating the recruitment to midwifery generally and, in particular, at encouraging the return to midwifery of midwives no longer in practice.

Following a request by the Ministry for information to enable the Minister to assess the effectiveness of the campaign as a whole over the period June to August 1964, it was found that six whole-time and three part-time midwives were recruited in the County in that period but only two of these appointments were considered to be a direct result of the campaign. Six other enquiries were received but for various reasons it was not practicable to offer employment. The results in this County were therefore not very encouraging.

Midwifery Service—Discharges from Hospital

As reported last year, the trend for maternity patients confined in hospital to be discharged home before the tenth day is increasing and in 1964 the figure rose to 7,126, an increase of 1,349 over 1963.

Equipment for Resuscitation of the Newborn

Following consultations with the North-East Metropolitan Regional Hospital Board's Advisory Committee on Obstetrics, in the light of recommendations made by the Maternity Services Emergency Informal Committee (The National Birthday Trust Fund) on the question of suitable apparatus for the administration of oxygen to newborn babies suffering from asphyxia neonatorum, approval was given to all District Midwives employed by the Council being provided, as soon as practicable, with suitable infant resuscitation apparatus.

Analgesia

All the Domiciliary Midwives employed by the County Council during 1964 were qualified to administer inhalational analgesics in accordance with the requirements of the Central Midwives' Board. Inhalational analgesia was administered to 81·5 per cent. of the patients confined at home (0·9 per cent. less than in 1963). Details are given below:—

Cases attended by County

Council Midwives	1964	1963
Gas and Air	6,526	7,367
Trilene	2,981	2,513
Pethidine	7,023	6,988

During the year approval was given to Domiciliary Midwives using the drug Syntometrine on their own responsibility, provided they had been thoroughly instructed in its use and methods of administration or application and the drug is given after the third stage of labour.

Ante-natal and post-natal clinics

The following table shows the attendances at ante-natal and post-natal clinics during 1964, with comparable figures for the three previous years:—

	Number of women in attendance during the year	Total number of attendances during the year	
		Medical Officers sessions	Midwives sessions
For ante-natal examination—			
1964	15,802	35,373	42,523
1963	15,890	44,380	43,512
1962	12,487	36,656	40,637
1961	14,605	39,891	37,050
For post-natal examination—			
1964	3,224	3,968	—
1963	3,550	3,942	—
1962	3,325	3,717	—
1961	3,452	4,052	—

Puerperal Pyrexia

The number of cases of puerperal pyrexia notified during 1964, was slightly higher than that for the previous year: the total being 204 as against 199, of which 43 cases were from domiciliary confinements, an increase of 15 on 1963.

Ophthalmia Neonatorum

There were 17 notified cases of ophthalmia neonatorum in 1964, an increase of 2 on the previous year. No impairment of vision was reported in any of these cases.

Maternal Deaths

The number of deaths attributed to pregnancy, child birth or abortion during the year was four, a reduction of eight on the previous year. The maternal death rate per thousand live births in the County was 0·11 as compared with 0·25 nationally.

Detailed reports on each maternal death continued to be sent to the Regional Assessor.

Care of Unmarried Mothers and their Babies

The arrangements whereby the Chelmsford Diocesan Moral Welfare Association undertake the care of unmarried mothers and their children for the County Council on an agency basis, continued throughout the year.

The Association made arrangements for 342 unmarried mothers to be admitted to hostels during 1964, 37 more than in 1963. Of these, 62 were cared for in hostels outside the Administrative County.

Training of Pupil Midwives

Training for the Part II Certificate of the Central Midwives' Board continued to be undertaken at the County Council's Training Homes and during 1964, 89 pupils received such training.

The arrangements whereby pupil midwives from various hospitals are boarded out with midwives in the Health Areas for 3 months of their Part II training were continued and 105 pupils were provided with accommodation during the year.

HOME NURSING SERVICE

During the year 42 student district nurses undertook their training at the County Council's Training Homes. Of these, 39 were successful in passing the examination of the Queen's Institute of District Nursing.

Statistics

The total number of patients visited by home nurses during 1964 was 24,464, a decrease of 1,835 on the figure for 1963, the majority of the decrease being in the patients over 65 years of age. The total number of visits paid to these patients was 694,217 and it will be seen from the following table that despite the lower number of patients the number of visits has increased by 35,137:—

Age group	Number of cases attended by Home Nurses during			Number of visits paid by Home Nurses during		
	1962	1963	1964	1962	1963	1964
Under 5 years of age	859	886	898	4,433	4,795	5,247
Over 5 and under 65 years	11,805	8,884	8,543	229,077	186,372	184,977
Over 65 years of age	15,054	16,529	15,023	441,795	467,913	503,993
All ages	27,718	26,299	24,464	675,305	659,080	694,217

HEALTH VISITING

Staff

There were 244 full-time and 28 part-time health visitors employed at the end of 1964, in addition to 18 full-time and 3 part-time tuberculosis visitors. The comparable figures for 1963 were 240 full-time and 29 part-time health visitors and 20 full-time and four part-time tuberculosis visitors.

The scheme for sponsoring student health visitors continued throughout the year and the 15 students mentioned in last year's Report all passed the examination for the Health Visitors' Certificate of the Royal Society of Health.

At the end of 1964, 18 students sponsored by the County Council were attending a course of health visitor training at the South-East Essex College of Technology, Dagenham.

Allocation of Health Visitors to Individual Medical Practices

In my Report last year I mentioned that provision had been made in the County Council's Ten Year Development Plan for the allocation of health visitors, as the staffing position permits, to work with general medical practitioners or groups of practitioners and that the County Health Committee had agreed upon four pilot schemes with the Essex Local Medical Committee, one such scheme (the attachment of a health visitor to an urban practice) having been in operation in Romford for some time.

During the year it was possible to implement two further pilot schemes: (1) the allocation of a health visitor to a rural practice and (2) the sharing of a health visitor's services between two rural practices). The Essex Local Medical Committee were unable, however, to suggest suitable practices to enable the remaining scheme (the attachment of a health visitor to two urban practices) to be put into operation.

Owing to the fact that, under London Government Reorganisation, Romford would become part of the London Borough of Havering on 1st April, 1965, consideration was being given at the end of the year to the introduction of a similar scheme in "residual" Essex to replace that operating in Romford.

Experience is being gained from these schemes which will be of value should it prove possible eventually to provide a comprehensive scheme for the whole Administrative County.

A Sixtieth Anniversary

The year under review marked the Sixtieth Anniversary of the first occasion on which Health Visitors were employed in Essex, and to commemorate this event, a message of appreciation and thanks for the valuable service rendered during the past 60 years was sent, on behalf of the County Health Committee, to all members of the Council's Health Visiting staff.

SECTION V—PREVENTIVE MEDICINE

CARE AND AFTER-CARE—TUBERCULOSIS

As reported last year, the number of primary notifications of tuberculosis continued to decrease, the figure being 586, i.e. 21 less than last year.

The following table gives detailed information about the notification of respiratory and non-respiratory cases received during 1964 :—

	Sex	Formal Notifications														Total (all ages)	
		Primary Notification of New Cases of Tuberculosis															
		0-	1-	2-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-			
Respiratory	M	1	2	10	12	3	17	24	56	50	58	61	31	19	346*		
	F	—	1	3	9	3	17	13	43	30	16	15	11	4	165		
Non-Respiratory	M	—	3	1	1	3	2	3	15	10	3	2	2	—	43		
	F	—	—	1	3	—	1	4	7	4	4	4	2	2	32		

* Includes two cases for whom age is unknown.

The number of cases which came to the knowledge of Medical Officers of Health otherwise than by formal notification was 66 (33 males and 33 females). Most of these cases were in the south-east of the County and appear to be removals into the district.

The number of primary notifications of tuberculosis, the number of deaths attributed to the disease and the annual notification and death rates in each quinquennium since 1925, and for individual years since 1959, are shown in the following table :—

	Respiratory Tuberculosis				Non-Respiratory Tuberculosis				Tuberculosis (all forms)			
	Notifications		Deaths		Notifications		Deaths		Notifications		Deaths	
	No.	Rate*	No.	Rate*	No.	Rate*	No.	Rate*	No.	Rate*	No.	Rate*
1925-29	5,626	1.09	3,376	0.65	1,853	0.36	704	0.14	7,479	1.45	4,080	0.79
1930-34	6,005	0.97	3,498	0.57	2,122	0.34	705	0.11	8,127	1.32	4,203	0.68
1935-39	5,521	0.81	3,015	0.44	1,783	0.26	577	0.08	7,304	1.07	3,592	0.53
1940-44	6,507	1.02	3,081	0.48	1,859	0.29	592	0.09	8,366	1.31	3,673	0.58
1945-49	6,952	0.95	2,674	0.37	1,381	0.19	404	0.06	8,333	1.14	3,078	0.42
1950-54	6,293	0.77	1,448	0.18	879	0.11	174	0.02	7,172	0.88	1,622	0.20
1955-59	3,915	0.45	630	0.07	537	0.06	80	0.01	4,452	0.51	710	0.08
1960-64	2,911	0.31	449	0.05	391	0.04	45	0.00	3,302	0.35	494	0.05
1959	646	0.36	106	0.06	61	0.03	8	0.00	707	0.39	114	0.06
1960	662	0.36	106	0.06	87	0.05	12	0.01	749	0.41	118	0.06
1961	607	0.33	85	0.05	85	0.05	12	0.01	692	0.37	97	0.05
1962	591	0.31	99	0.05	75	0.04	10	0.01	666	0.35	109	0.05
1963	540	0.28	84	0.04	69	0.04	5	0.00	609	0.32	89	0.06
1964	511	0.26	75	0.04	75	0.04	6	0.00	586	0.30	81	0.04

*Rate per 1,000 population

Domiciliary Visits

Health visitors and Tuberculosis visitors continued to provide a link with chest clinics by visiting patients in their homes. In addition visits are paid by the health visitors and tuberculosis visitors to the chest clinics to discuss the needs of the patients with the chest physicians.

Summary of Work Carried Out by Health Visitors/Tuberculosis Visitors during 1964

	Tuberculosis households visited		Additional information available for Tuberculosis Visitors only	
	Tuberculosis Visitors	Health Visitors	Visits to households	Chest Clinic Sessions
Colchester M.B.	—	39	—	—
North-East Essex	—	189	—	—
Mid-Essex	—	898	—	—
Basildon U.D.	—	94	—	—
South-East Essex	—	153	—	—
South Essex	441	69	4,746	789
Harlow	413	—	747	308
Forest	982	162	3,541	684
Romford	2,100	—	3,567	278
Barking	227	20	1,439	294
Dagenham	899	6	2,796	254
Ilford	830	12	2,163	514
Leyton	228	10	903	489
Walthamstow	265	15	1,438	466
TOTALS	6,385	1,667	21,340	4,076

Follow-up of Contacts

During 1964, 511 cases of respiratory tuberculosis were notified (29 less than for 1963) and 3,968 contacts were examined for the first time; 895 less than in the previous year.

Open Air Shelters

The need for open-air shelters is declining gradually, the number in use at the end of 1964, being seven, two less than in 1963. Twenty-two visits of inspection were made to these shelters during the year.

B.C.G. Vaccination

The scheme for the vaccination of contacts of patients suffering from respiratory tuberculosis, whose Mantoux test proved negative, continued throughout the year. The number of contacts skin tested during 1964, was very little different from the previous year, as the following details will show :—

	1962	1963	1964
Number of contacts skin tested	2,489	2,185	2,182
Number of contacts found to be negative	652	336	345
Number of contacts found to be positive ...	1,823	1,813	1,824

The B.C.G. vaccination of school children continued during 1964, and comparable figures for 1962, 1963 and 1964, are given below :—

	1962	1963	1964
Number of pupils and students skin tested	17,000	16,429	16,275
Number of pupils and students undergoing tuberculin tests :—			
Positive results	1,606	1,335	1,636
Negative results	14,695	14,430	14,267
Vaccination with B.C.G.	14,456	14,310	14,158

Occupational Therapy for the Tuberculous

I have to thank Miss Z. E. Mercer, Occupational Therapist, for the following report on the Domiciliary Occupational Therapy which she undertook during the year for tuberculous patients residing in Barking, Dagenham and Ilford Health Areas and also part of the Harlow, Forest and South Essex Health Areas :—

"There were 642 visits to patients and 47 visits to clinics during the year. This is less than in previous years because of two months special leave taken in the early part of the year, and an unfortunate accident in November reduced the visits in November and December. During my absence patients were kept in touch by post.

As usual, articles made by patients gained a high proportion of prizes at the Dagenham Town Show and the Old People's Welfare Exhibition. Successful sales of work were also undertaken.

There were 31 new patients in the year with a total of 55 on my list at the end of the year. All patients on this list are visited fortnightly at least, with new patients having one or more visits each week until confidence and initiative are regained. There is no waiting list as such, as it is pointless to suggest Occupational Therapy to patients when it is very well known that there will be several months delay before a definite visit can be undertaken. An arrangement was made at the Chest Clinics whereby I contacted the Chest Physician or Health Visitors when it was possible for me to take new patients.

It must be remembered that I worked in several Health Areas and I tried to keep a balance of visits and numbers of patients for each area. Had I not done this, the case load in some areas would have been higher, and in others lower. Furthermore, being single-handed there was a limit to the numbers I could work with, while at the same time providing a competent service for all concerned. With this in mind, the radius of visits was kept to approximately 30 miles. This went as far east as Stanford-le-Hope and Grays, Harlow and North Weald to the north and Nazeing and Chingford westerly, with Ilford, Barking, Dagenham and Rainham to the south, Hutton, Romford and Hornchurch were also covered in this.

A wide range of work is undertaken, from using a small printing press, bookbinding and marquetry to toymaking and embroidery. Tools and other equipment are loaned out as required. When the patients become proficient they usually obtain their own tools and return those loaned to them. Materials are paid for by patients, sometimes in full but more often in instalments, or perhaps when the articles are sold. Most of those people eligible for Domiciliary Occupational Therapy are very appreciative of the facilities provided and there is no doubt that most of them have benefited in many ways."

Extra Nourishment

The practice whereby tuberculous patients receive a pint of milk a day free of charge continued during 1964, and at the end of the year 1,235 (9 less than in 1963) were in receipt of this extra nourishment.

Rehabilitation

At the end of the year two patients were receiving financial assistance for maintenance at Rehabilitation Centres, the same number as in 1963.

Mass Miniature Radiography

The North-East Metropolitan Regional Hospital Board continued to operate the three mobile radiography units in those parts of the County within the Board's Catchment Area. A total of 113 sessions were held at factories, hospitals, etc.

The total number of persons X-rayed was 81,347. (45,014 males and 36,333 females).

Books for Tuberculous Patients

A total of 233 books were borrowed from the Hospital Library Service operated by the Joint Committee of the British Red Cross and Order of St. John of Jerusalem, by 5 different patients.

Tuberculosis Care Associations

The number of Tuberculosis Care Associations in the County dropped to 17, two (Walthamstow & Chingford and Leyton) having combined. The expenditure for 1964 amounted to £10,737, a decrease of £491 on the previous year. The following figures show the items on which this money was expended:—

	£
Milk and Groceries ...	7,046
Fuel ...	600
Fares ...	293
Clothing, Furniture, etc.	453
Holidays, Outings, etc.	84
Diversional Therapy	28
Other Grants	1,060
Special Efforts	703
Printing, Postages, etc.	470
 Total ...	10,737

The sum of £2,800 was allocated by the Public Protection Committee under the Sunday Entertainments Act, 1932, for distribution to Tuberculosis Care Associations. The County Council also continued to make grants to the Care Associations on a similar basis as in previous years, i.e. £2 for each 1,000 population together with a sum not exceeding £25 in respect of postages and other petty disbursements.

OTHER ILLNESSES

Recuperative Convalescence

The scheme whereby convalescent holidays are provided for patients under Section 28 of the National Health Service Act, 1946, continued during 1964 and 600 patients were provided with these recuperative holidays, 18 more than in 1963.

Loan of Sickroom Equipment

Sickroom equipment continued to be available to patients as in previous years, from either the Home Nurses or the Health Area stores, the larger items of equipment being stored centrally.

INFECTIOUS DISEASES

Table IV on page 111 shows the corrected numbers of notifications of infectious disease received by Medical Officers of Health of County Districts during 1964. The total for the Administrative County in 1963 is also given. The incidence of most diseases was below average and in particular there were only three cases of acute poliomyelitis compared with six in 1963 and 64 as recently as 1959. There was, however, a considerable increase in the number of notifications of infective hepatitis. This disease, which is only notifiable in that part of the Administrative County included in the Eastern Region of England, seems to become more prevalent every three or four years as may be seen from the following figures showing the number of cases notified in each of the last 12 years:—

1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
212	683	198	99	149	80	33	111	221	62	129	469

Apart from Colchester, where there were 94 cases, almost all of the cases were notified in the south of the County; in particular there were 61 cases in Hornchurch U.D., 55 in Rochford R.D. and 50 in Basildon U.D., but as there is known to be considerable under-notification of this disease, the incidence may not be so patchy as this indicates.

VACCINATION AND IMMUNISATION

Smallpox

During 1964, no notifications of smallpox were received, but the following table shows the numbers vaccinated and re-vaccinated against smallpox during the year:—

	Under 1 Year	1 Year	2-4 Years	5-14 Years	15 Years and over	Total
Number vaccinated	3,679 (3,661)	9,968 (2,652)	2,247 (539)	702 (685)	1,735 (1,719)	18,331 (9,256)
Number re-vaccinated	— (2)	16 (11)	384 (304)	1,126 (854)	5,730 (5,131)	7,256 (6,305)

It will be seen that there is a considerable increase in the number of children of 1 year who were vaccinated, as against the previous year (shown in parenthesis.)

The vaccinations under 1 year were in the following age groups:—

0— 3 months	...	...	...	...	407
3— 6 months	...	...	...	...	938
6— 9 months	...	...	...	...	768
9—12 months	...	...	...	...	1,566

There was one case of generalised vaccinia in a child of one year.

Diphtheria, Whooping Cough and Tetanus

	Children born in years—							Total
	1964	1963	1962	1961	1960	1955-1959	1950-1954	
A. Number of children who completed a full course of primary immunisation								
Diphtheria	8,773	16,955	4,295	917	363	1,610	324	33,237
Whooping Cough	8,675	16,850	3,918	775	258	601	115	31,192
Tetanus	8,749	17,159	4,124	1,145	898	8,407	4,877	45,359
B. Number of children who completed a secondary (re-inforcing) injection								
Diphtheria	45	2,758	4,783	1,159	755	15,212	2,189	26,901

During 1964, the number of triple, double and single antigen injections given to persons of all ages was as below (comparable figures for 1963 are given in brackets):—

		Primary Courses	Reinforcing Injections
Triple (D.P.T.)*	...	30,833 (24,825)	12,591 (8,870)
Double (D.T.)	...	2,050 (3,151)	5,988 (3,963)
Diphtheria ...	...	419 (678)	8,360 (10,013)
Pertussis ...	...	368 (557)	545 (823)
Tetanus ...	...	13,634 (16,474)	5,627 (9,455)

* Includes 187 primary and 10 reinforcing injections of quadruple vaccine.

Poliomyelitis

During 1964 the scheme for vaccination against poliomyelitis continued satisfactorily and the numbers of primary doses of vaccine given during the year were as follows:—

Year of Birth	Salk Vaccine	Sabin (oral) Vaccine
1964	287	3,873
1963	921	19,455
1962	201	3,936
1961	59	1,518
1943 - 1960	161	3,821
1933 - 1942	72	1,021
Others	36	745
Total	1,737	34,369

The following reinforcing doses were also given :—

Salk Vaccine

3rd injection (or 4th of quadruple)	...	1,193
4th injection (or 5th of quadruple)	...	903

Sabin (Oral) Vaccine

After :

2 doses Salk Vaccine	...	...	...	1,560
3 doses Salk or Sabin Vaccine, or 2 Salk and 2 Sabin	...	...	...	22,677

Yellow Fever

Vaccinations against Yellow Fever continued to be undertaken at the Centre at the Health Services Clinic, Coval Lane, Chelmsford, throughout 1964 and a total of 143 injections were given, this being 10 more than in 1963. The charge remained at £1 1s. 0d. subject to reduction in accordance with the County Council's assessment scales.

ESSEX EPIDEMIOLOGICAL COMMITTEE

No meeting of the Essex Epidemiological Committee was held during 1964.

VENEREAL DISEASE

The figures submitted by the special clinics show that during 1964 the diagnosed cases of syphilis and gonorrhoea increased by 39 over those for 1963. The following table gives the numbers of cases notified over the last six years :—

	1959	1960	1961	1962	1963	1964
Syphilis	67	66	76	58	40	53
Gonorrhoea	357	395	419	458	396	422

The figures given below show an analysis of new cases notified according to clinics at which the diagnosis was made :—

Place of Diagnosis	Syphilis	Gonorrhoea	Other Conditions
Essex	16	180	1,255
London	31	200	1,310
Elsewhere	6	42	282

HEALTH EDUCATION

As stated in my report for 1963, administratively Health Education is divided. The day to day work is the responsibility of the Health Areas and is supervised with one or two exceptions by the Area Superintendent Health Visitors. Approval has been given to the appointment of Area Health Education Officers which should result in an improved service throughout the whole of the Administrative County as the officers will be in a position to concentrate their efforts primarily on Health Education. There is also central administration supervised by the County Health Education Organiser and an Assistant Health Education Organiser to assist the Health Area staffs and to co-ordinate their work when necessary. The County Council also have a Health Education Centre consisting of a lecture room, equipped with every form of visual aid, a fully equipped workshop, a photographic dark room and film editing room and a large storage area for Health Education exhibits and exhibition materials. In this centre in-service training courses are held and films are previewed by a selected panel of staff before being released for use throughout the Administrative County. Photographs, slides and film strips are developed and printed and exhibitions and other visual aids are created.

Dental Health Education

The Harlow Dental Health Education Campaign which is designed to last five years is progressing satisfactorily. Reference to this campaign has been included in the report of the County Dental Officer. I am pleased to report that this type of teaching which was developed in Harlow is now being extended to schools in other parts of the Administrative County.

Mouth-to-Mouth Resuscitation

The mouth-to-mouth method of resuscitation has continued to receive considerable publicity in the press and parallel with this publicity intensive efforts have been made to further this method amongst Health Education audiences. A total of 112 demonstrations were given at 27 schools, 19 health services clinics, 22 ambulance training courses and 44 hospitals, clubs and domestic help training courses. The form these demonstrations take is the showing of a film followed by a demonstration with a life-size model on which members of the audience are subsequently invited to practise.

Smoking and Health

Publicity campaigns on smoking and health continued throughout the year in the schools, teachers training colleges, technical colleges, health services clinics, youth clubs and other clubs and meetings throughout the Administrative County. In addition to these special campaigns, every opportunity was taken in the course of day to day health education activities to bring the dangers of smoking to the public attention.

Royal Society for the Prevention of Accidents

Literature produced by the Royal Society for the Prevention of Accidents continued to be made available to the Area Medical Officers and the County Council, as in the past, made a financial grant to this Society.

Home Safety

At the end of the year there were 13 Home Safety Committees in operation in the Administrative County and a grant of £20 was again made to each Committee.

With a view to co-ordination of the work undertaken by the Committees the Essex Home Safety Liaison Committee was formed and one member from each Home Safety Committee is appointed to the Liaison Committee.

In addition to the excellent work undertaken by the voluntary bodies, a considerable amount of publicity was given to the prevention of accidents by Area Medical Officers and the Central Office staff by way of film shows and exhibitions. The Central Office staff also co-operated with a number of Medical Officers of Health by supplying and erecting displays for local exhibitions.

A 16 m.m. film on Home Safety entitled "Dangerous Living" was made as well as an 8 m.m. film for use with the Technicolor 800E projector. This short film portrays numerous hazards in the home and is used extensively in the form of home safety competitions.

Film Shows

In all, a total of 740 film shows were given and 1,601 films shown during the year to supplement health education talks and during health weeks held in the schools.

There was an increasing number of calls on the Health Education Service by outside bodies, both voluntary and statutory, for assistance in various projects, at Teachers Training Colleges and films on Smoking and Health have been extensively used and lectures given to the students by the Health Education Organiser. At one College a full scale Dental Health project was held at which pupils from a nearby Primary School attended class by class. A number of student teachers sat in at each session to observe the presentation and method of teaching this subject and at the end of each day, time was given for the students to discuss the project with the County Dental Officer and Health Education Organiser. At another college a similar project was held and was covered by closed circuit television to over 200 students.

Venereal Disease

As a result of the sharp rise in the number of cases of venereal disease reported throughout the country as a whole, especially among young persons, teaching on this subject was generally increased, with concentration on this section of the community. Health Education on this subject is, however, a difficult undertaking. It is felt that this is a problem which instead of being approached separately should be included as a natural adjunct to other Health Education subjects undertaken in schools.

Accordingly, wherever possible, the subject of venereal disease was introduced into the school health education programme with the co-operation of the teachers, and to this end, meetings with head teachers and their staffs were held, during which the facts and figures and the latest visual aids were shown so that they could introduce the subject in appropriate lessons in a manner which they considered acceptable to the children.

Posters advertising Venereal Disease Clinic sessions held at hospitals continued to be exhibited in suitable places.

DOMESTIC HELP SERVICE

The figures below show the numbers of whole-time, part-time and casual domestic helps employed in the Service for the last five years:—

Category	1960	1961	1962	1963	1964
Whole-time helps	17	22	21	19	23
Regular part-time helps	1,242	1,688	1,773	1,931	2,051
Other helps (casual)	1,575	1,297	1,383	1,269	1,171
TOTAL	2,834	3,007	3,177	3,219	3,245

During 1964, 8,632 new cases received help, 75 more than in the previous year. A total of 20,219 cases, 1,227 more than in 1963, received help during the year, the number of hours given to all cases being 2,568,036.

New cases

Category	1960	1961	1962	1963	1964
Aged persons	3,762	3,873	3,917	4,464	4,356
Chronic Sick (including Tuberculosis) under 65 years	829	792	816	764	818
Maternity	2,314	2,403	2,469	2,362	2,491
Others	1,069	1,181	1,084	967	967
TOTAL NEW CASES	7,974	8,249	8,286	8,557	8,632

Total number of cases and hours provided

The following table shows the number of cases helped and the hours provided for the past four years, together with comparative figures for 1954, which give an indication of the growth of the service over the last ten years.

Domestic Help Cases and Hours

Category	1954		1961		1962		1963		1964	
	No. of Cases	No. of hours provided	No. of Cases	No. of hours provided	No. of Cases	No. of hours provided	No. of Cases	No. of hours provided	No. of Cases	No. of hours provided
Aged persons	5,176	976,454	11,183	1,780,900	11,948	1,866,500	13,324	2,021,400	14,256	2,102,110
Chronic Sick under 65 years (including Tuberculosis) ...	1,436	104,464	2,047	360,900	2,103	349,700	1,952	293,200	2,098	298,688
Maternity ...	2,007	138,319	2,529	107,600	2,611	105,500	2,527	99,700	2,600	96,136
Others* ...	1,173	104,847	1,418	90,200	1,378	84,700	1,189	69,700	1,265	71,102
	9,792	1,324,084	17,177	2,339,600	18,040	2,406,400	18,992	2,484,000	20,219	2,568,036

* Includes the following cases :—

Mental disorders under 65 years	...	...	68
Acute Illness ...	...	...	845
Harassed Mothers ...	...	...	99
Problem Families ...	...	...	13
Absence of Mother ...	...	...	169

Training

During the year three centrally arranged Training Courses for experienced helps took place. The helps who attend become enthusiastic about the value of training and ask for further such facilities, specifying their special interests. As a result, consideration will be given to this, once Area training is well established.

Six courses took place in four of the Health Areas, and it is proposed to extend training to the remaining Health Areas. Newly appointed helps and helps unable to spare the time for the central courses benefit from these.

The central courses are of two weeks duration and more comprehensive than the Area courses, which consist of a two hour session on one day a week for one term, but a basic syllabus is used, at present, for all courses. Fresh subjects have been experimentally introduced in the Area courses and talks on mental health were well received and proved helpful.

The effects of training are varied but the main ones are that the helps feel more confident in their work, have a better understanding of the needs of the patients and realise their valuable place in the health team.

Trained helps ease the organiser's work in many ways since they are less inclined to leave the service than untrained staff and an increasing number of helps are competent to meet a variety of demands in any circumstances, thus providing a special service of much value.

Transport

Twenty helps in the County are authorised to use their own motorised transport on duty, owing to the inadequacy of public transport both in rural and urban districts. Without this facility a number of patients would be without the assistance of a help, since not only are patients in outlying districts visited, but as less time is spent in travelling more patients are attended in the time the help has available for the service.

NIGHT ATTENDANCE SERVICE

As in previous years the Night Attendance Service continued to be provided for cases in the following categories :—

- (1) Patients residing alone who are seriously ill;
- (2) Patients seriously ill in their own homes where an aged husband or wife cannot provide the necessary assistance;
- (3) The relief of relatives who have to give routine night attention to sick people.

During 1964 the calls on this Service showed a considerable decrease on the previous year. The following table shows comparative figures for the last five years :—

	1960	1961	1962	1963	1964
Requests for help	298	290	272	285	192
New cases helped	209	222	213	222	156
Total cases helped.....	215	234	224	234	166
Hours of assistance.....	20,848	23,064	18,034	18,802	13,614

NEIGHBOURLY HELP SERVICE

In the light of experience gained since the inception of the Domestic Help Service and the Night Attendance Service, it was evident that some action appeared necessary in order to close the gaps which existed between these two services. For example, it had been apparent that many elderly, chronic sick, disabled or infirm people who are either living alone or with other old people would benefit from one or more periods of assistance throughout the day and where the provision of a Domestic Help, often from a considerable distance, is not a satisfactory answer to the problem.

For this reason the County Council agreed to introduce for a period of six months in the first instance, an experimental Neighbourly Help Scheme in the Leyton and Mid-Essex Health Areas and in the area of the Basildon Delegatee Authority. This service commenced in June, 1964, and is provided in accordance with the Council's approved Proposals under Section 28 of the National Health Service Act, 1946.

Neighbourly helps are recruited from men or women residing within walking distance of the households where assistance is required but on a less formal basis than is used for regular employees of the County Council. The actual duties and times of attendance are arranged by the Area Domestic Help Organiser after discussion with the help and with the beneficiary.

During the experimental period, it was evident that the introduction of this scheme had been fully justified and plans were being made to extend the service throughout the Administrative County.

DISPOSABLE PADS FOR INCONTINENT PERSONS

In accordance with their arrangements for the care of patients under Section 28 of the National Health Service Act, 1946, the County Council have, since 1961, continued to provide disposable pads, free of charge, for incontinent persons who are being nursed at home under the general care of their private medical attendant if a district nurse or the doctor in attendance is satisfied they are necessary. As an alternative provision and where their use is considered desirable, cotton draw-sheets are loaned free of charge to any incontinent person living at home whether or not a District Nurse is in attendance.

It is estimated that just over a thousand patients are being provided annually with pads throughout the Administrative County and though the disposal of pads poses occasional problems, especially in smokeless zones and in flats where there are no open fire grates in which to burn them, they may usually be disposed of in the dustbin with other refuse.

FACTORIES ACTS, 1937 AND 1948

The County Medical Officer of Health was not called upon under Section 126 of the Factories Act, 1948, to perform or arrange the performance of the functions of factory doctors.

NATIONAL ASSISTANCE ACT, 1948

Hostels for the Aged

During 1964 a Principal Medical Officer paid 41 visits to Welfare Hostels under the jurisdiction of the Welfare Committee. Advice was given at these visits on various questions and the arrangements for chiropody treatment for the residents were also reviewed.

Welfare of the Blind and Partially Sighted

During 1964, 609 Forms B.D.8 were completed for new cases, and of these 28 were found to have defective sight and 31 were ineligible for registration. 357 persons were found to be registrable as Blind Persons and 193 as partially sighted.

With a view to the re-classification of the patients, 364 re-examinations were carried out with the following results:—

Blindness	...	...	...	...	...	110
Partial Sightedness	...	...	...	...	...	204
Defective Sightedness	...	...	...	...	...	29
Not eligible for registration	...	...	...	...	...	21

A summary of the information obtained in following up all the new cases where treatment was recommended on Forms B.D.8 is given in the table below:—

	Cause of Disability			
	Cataract	Glaucoma	Retrobulbar Fibroplasia	Others
New cases only :—				
(1) Number of cases registered during the year in respect of which Form B.D.8 recommended—				
(a) No treatment	35	12	—	203
(b) Treatment (medical, surgical or optical)	104	75	—	221
(2) Number of cases at (1)(b) above which on follow-up—				
(a) Had received treatment	78	30	—	154
(b) Had refused treatment	3	—	—	—

I am indebted to the County Welfare Officer for the following information relating to the registration of persons found to be blind or partially sighted:—

The total number of blind persons on the register at the end of 1964 was 3,438 (an increase of 84 over 1963) and of these, 1,321 were males and 2,117 were females. The age groups of these patients were as follows:—

	Under 16 years	16-20	21-29	30-39	40-49	50-59	60-64	65-69	70 & over	Total
Male	36	26	39	60	122	147	99	144	648	1,321
Female	43	18	36	50	65	148	125	186	1,446	2,117
TOTAL	79	44	75	110	187	295	224	330	2,094	3,438

At the end of 1964, 1,018 persons were registered as partially sighted and of these 384 were males and 634 females. The age grouping of these patients was as follows:—

	Under 16 years	16-20	21-49	50-64	65 and over	Total
Male	47	31	104	62	140	384
Female	28	21	61	96	428	634
TOTAL	75	52	165	158	568	1,018

CHIROPODY

The number of chiropodists employed at the end of the year was 56·2 equivalent whole-time which is an increase of 8·45 over the previous year.

In four Health Areas comprehensive chiropody facilities continued to be provided and in the remaining Health Areas treatment for the priority categories, i.e. the aged, the physically handicapped, and expectant mothers, was maintained and expanded where staff permitted.

A grant was also made to the Essex Old People's Welfare Committee to enable them to assist in the running of voluntary services operated by Old People's Clubs where the Council were unable to provide the services of a chiropodist.

At the end of the year 46 homes for aged persons maintained by the County Welfare Department were receiving regular visits from a chiropodist and during the year 768 sessions were devoted to these residents.

Details of the number of treatments given are as summarised in the table given below:—

	New cases treated	Cases under treatment	Clinic attendances	Domiciliary treatments	Treatments : at Welfare Committee's Establish- ments
Children	1,159	465	5,655	—	—
Physically handicapped	405	814	4,520	2,921	622
Aged over 65 years	5,364	21,039	92,227	17,768	6,830
Others	1,659	4,611	20,312	9	—
TOTAL	8,587	26,929	122,714	20,698	7,452

REGISTRATION AND INSPECTION OF NURSING HOMES

At the end of 1964 there was a total of 16 nursing homes registered by the County Council under Part VI of the Public Health Act, 1936; during the year, one Nursing Home was newly registered and three closed down.

AGENCIES FOR THE SUPPLY OF NURSES

No agencies were registered in the Administrative County during 1964.

SECTION VI—THE AMBULANCE SERVICE

Operation of the Service

The arrangements for the operational control of the County Ambulance Service continued on the basis referred to in previous reports. All requests for ambulance transport were dealt with, and all vehicle movement was controlled by, the two Divisional Ambulance controls at Chelmsford and Ilford. The revision of the staff establishment of the two Controls indicated in the Annual Report for 1963, has without doubt enabled the efficiency of this part of the service to be maintained at a high level, as reflected in the statistical tables set out on pages 77 and 78.

The revised scheme of station management envisaged in the Report for 1961, became fully effective during 1964, and each station in Division I—the Metropolitan area of the County—was in the charge of an Area Superintendent who had four Head Drivers to assist him in running the station. Division II—the more rural part of the County—has been divided into four Areas each containing a group of five ambulance stations. An Area Superintendent is in charge of each area with an office in the largest station in the area concerned and he has a clerk to assist him in his office duties. Each of the smaller stations is in the direct charge of a Head Driver although the Thurrock Ambulance Station, which has special responsibilities in connection with the Port of London (Tilbury) is in charge of an Assistant Area Superintendent who also acts as a relief in the event of an Area Superintendent being absent from duty for a prolonged period.

Among the difficulties experienced in providing an efficient, as well as an economic, service is the problem of returning patients to their homes with the minimum amount of delay following treatment. For some time it has been considered that the presence of an officer of the Ambulance Service at the larger hospitals for liaison duties between the hospital staff and ambulance staff would ensure closer co-operation and effect a quicker turn round of vehicles and result in patients having to wait for shorter periods before returning home. With this in mind, an officer was outposted some years ago to the London Hospital where special difficulties were met. This particular arrangement was kept under constant review and early in 1964 the National Health Service Joint Advisory Committee for Essex were asked to reconsider the question of the provision of Transport Officers at hospitals in view of the number of complaints of delays in returning patients to their homes.

At the same time discussions took place with the Brentwood Group Hospital Management Committee regarding the possible appointment of a Transport Officer at Harold Wood Hospital. This resulted in agreement being reached that such an appointment was desirable in order to achieve co-ordination between the three main departments in the hospital and to ensure closer co-operation with the County Ambulance Service and as it was considered advisable for the person concerned to be in a position to issue instructions to ambulance crews, it was decided to make a joint appointment. The officer concerned is on the staff of the County Council and the Hospital Management Committee reimburse the County Council 50 per cent. of the cost of his salary, uniform and other expenses connected with the post.

Later in the year the Joint Advisory Committee indicated they were favourably inclined to joint appointments elsewhere and a similar arrangement has now been entered into with the Southend-on-Sea Group Hospital Management Committee although in view of the location of the Hospital—which is outside the Administrative County—the Management Committee only felt able to meet one-third of the costs.

The effect of these appointments will be carefully observed in order to determine whether the scheme should be extended to other selected hospitals in the County.

At the end of the year the Agency Services remained unchanged.

Staff

The numbers and categories of the operational staff in the service at the end of 1964 were: 9 Area Superintendents, 8 Station Officers, 6 Assistant Station Officers, 3 Assistant Area Superintendents, 28 Head Drivers, 454 Driver Attendants, 1 Area Clerk, 2 Control Supervisors, 10 Controllers, 8 Assistant Controllers, 17 Control Operatives, 11 Clerks/Telephonists, 6 Porters, 1 Officer outposted at the London Hospital and 2 Transport Officers.

A number of officers continue to hold, on a personal basis, the rank they held prior to the introduction in 1962, of the revised scheme of operational control and station management and undertake duties not always comparable to their previous post.

The staff were encouraged to obtain a first aid certificate and to take a refresher course at intervals not exceeding three years. In this connection, steps are being taken to encourage a higher degree of first aid qualification for Ambulance staff. At the end of 1964 all the Driver Attendants held current first aid qualifications.

V Vehicles and Equipment

In 1957, it was decided that all ambulance vehicles which were then fitted with petrol engines should be replaced by similar vehicles with diesel engines. The principal reason for the change was one of economy as it was understood that these engines had a lower fuel consumption than petrol engines.

A large number of complaints have been received since that time about this type of vehicle, particularly in respect of the vibration experienced, and as the first of the diesel-engined vehicles were due to be replaced in accordance with the policy of using vehicles for seven years or until they had completed 100,000 miles if a sitting case vehicle or 150,000 miles if an ambulance, Members were asked to look at the whole matter afresh. They were satisfied that the health and comfort of patients was of paramount importance and decided that, in future, vehicles powered by petrol engines should be purchased.

At the end of the year, the total fleet now numbered 106 ambulances, 71 sitting case vehicles, 19 dual-purpose vehicles and 11 taxi type vehicles. 125 vehicles were capable of carrying two stretcher patients, one stretcher and five sitting patients or eight sitting patients. Approximately 15 per cent. of the total number of vehicles in the Service continue to be held in reserve for use in any part of the County.

In addition three older vehicles have been retained as store vehicles for use in conveying in bulk first aid equipment to major accidents and these are kept in readiness at all times. Another vehicle has also been retained and converted for use as a float in carnival processions and other functions where the work of the Ambulance Service can be depicted.

Further experiments were carried out during the year, particularly with a view to aiding the movement of vehicles in the heavy traffic conditions frequently experienced in the larger towns in the County. It was considered that it was necessary for ambulances to be able to give better audible warning of their approach and it has been decided to amplify the sound of the bell, already fitted, by fitting a transistorised amplifier and mounting a loudspeaker which has a horn directing the sound to the front of the vehicle. As a first step 40 ambulances were fitted with this equipment during the year and it is intended that the remainder of the fleet will be equipped during 1965.

The experience of ambulance crews who attend road accidents has shown that difficulty is often experienced in releasing passengers from their cars, particularly when they are wearing safety straps. In order to assist in this matter it was decided to fit all ambulance vehicles with a crow-bar as an aid to prising open the doors and to provide a suitable implement for cutting through safety straps when these cannot be released by other means.

The general repair and maintenance of vehicles continued to be dealt with by the Chief Transport Officer and each vehicle was taken into one of the Council's workshops for servicing every 2,000 miles. A major overhaul continued to be undertaken every 10,000 miles.

Broomfield Hospital, Chelmsford

Broomfield Hospital, near Chelmsford, is situated some distance from the main road and the bus services and persons attending the out-patients department have found the long walk to and from the hospital difficult and tiring, particularly in bad weather.

To assist both patients and hospital a redundant sitting case vehicle has been loaned, free of charge, to the hospital authorities. This is maintained by them and driven by a member of the hospital staff and is used to convey patients to and from the bus stop and the hospital.

Ambulance Controls and Stations

In addition to the two Divisional Ambulance Controls 26 Ambulance Stations and two Agency Stations are in existence. New ambulance stations were opened at Basildon, Ongar and Wickford and work commenced on the erection of a new station at Burnham-on-Crouch. Arrangements were made for the Chelmsford Control to be extended and a temporary Ambulance Station was provided at Thundersley.

In view of the additional electrical equipment now being used on ambulance vehicles there is a heavier drain on the batteries which becomes noticeable during the winter months. Pre-heaters have been fitted to the vehicles themselves for some time, but as a further aid to easy starting in cold weather, battery chargers are being installed at all ambulance stations.

Carnival Processions

The specially adapted display vehicle was entered in the Dunmow Carnival procession and was awarded first prize in its class. The display, undertaken voluntarily by the staff of the Dunmow Ambulance Service and by the Health Education staff of the Central Office of the Health Department, stressed the importance of showing courtesy to ambulance drivers in order to facilitate the speedy and unhindered conveyance of patients to hospital.

It has been decided that, in future, the County Ambulance Service will be represented in as many Carnival Processions as possible throughout the County.

First Aid and Efficiency Competition

The First Aid and Efficiency Competition for the County Ambulance Services was held at the Chelmsford Ambulance Station when Driver Attendants S. A. Hamilton and Mrs. A. Hunt of the Ilford Ambulance Station proved winners. The winning team later took part in the Regional Competition, which was held at Battersea Park, London and performed with great distinction, finishing fourth with only a small number of marks separating them from the winning team.

Training of Staff

The training courses which commenced during the winter of 1961/62 were continued and were extended to include instruction in the duties of ambulance staff in both peace time and civil defence duties. Commencing in the autumn of 1964 refresher courses were held at Chelmsford and it is intended that such courses will now be a regular feature and will be arranged as and when appropriate.

National Safe Driving Competition

The awards gained by members of the County Ambulance staff in the 1963 National Safe Driving Competition were presented at ceremonies held at Chelmsford, Colchester and Walthamstow respectively when the Mayor of each Borough kindly made the presentations.

Some 400 members of the staff were finally eligible for gaining an award in the 1964 Competition; of these awards two were Silver Bars (26-28 years), one was a Silver Cross (25 years), eight were in respect of more than 20 years and 126 others were for more than 10 years safe driving.

Communications

The radio transmitter and mast which is sited at Langdon Hills, linked by U.H.F. radio with the master transmitter at Danbury and Ambulance Control at Chelmsford, continued to operate in 1964 and maintained the improvement in the standard of radio communication in the Thurrock area.

Incidents

The County Ambulance Service continued to carry out its full functions in all weather conditions and during the year the following incidents occurred which merit special attention and which received official recognition by the County Council.

On 23rd January, Driver Attendants F. C. Spragg and W. A. Hood, of the Colchester Ambulance Station, went to an emergency when they found a mother, considerably shocked, with a newly born baby still attached to the umbilical cord. There was a haemorrhage from the cord and artificial respiration was carried out on the baby which was revived. The mother and baby were eventually conveyed to hospital.

The Commissioner of Police of the Metropolis drew attention to an incident which occurred on 4th February, 1964, when police and ambulance personnel were called to a case of gas poisoning. Driver Attendants C. A. Firman and B. Hammond from Whipps Cross Ambulance Station were the crew concerned and took over from the Police Officers, who had arrived earlier, the task of applying artificial respiration to the patient who recovered. The Commissioner indicated he was very pleased to learn of the co-operation between the two services.

On 15th April, Driver Attendants I. E. Heckford and J. A. Taylor, from the Colchester Ambulance Station, were despatched to Abberton reservoir, where Driver Attendant Taylor, after being tied to a rope, recovered the body of a man from the water.

On 29th September, when returning home from duty, Driver Attendants D. R. Allen and A. W. C. Chandler of the Thurrock Ambulance Station, encountered a multiple road accident caused by early morning mist. Together they proceeded to attend to the injured until the ambulance arrived, when they continued to assist the duty crews with the casualties, and in addition, helped with their private car to convey eleven casualties to hospital.

A communication was received from a doctor praising the skill, tact and devotion to duty of Driver Attendants C. Dawkins and J. Andrews, who transferred a critically ill patient from Thaxted to Bishop's Stortford and stating that these two men played a significant part in saving the patient's life.

Statistics

The number of patients conveyed, total mileage involved, and the average mileage per patient in 1961, 1962, 1963 and 1964 for the whole Service are as follows:—

		Directly Provided Services	Agency Service	Hospital Car Service	Whole Service
Patients conveyed	... 1961	665,613	6,542	50,518	722,673
	1962	639,110	7,314	31,135	697,559
	1963	630,987	4,346	58,256	693,589
	1964	684,745	5,082	45,002	734,829
Mileage	... ... 1961	3,659,050	71,095	834,667	4,564,812
	1962	3,559,057	71,837	927,628	4,558,522
	1963	3,574,690	48,340	1,072,536	4,695,566
	1964	3,783,707	51,368	880,903	4,715,978
Average mileage per patient	1961	5.50	10.9	16.5	6.32
	1962	5.57	9.8	18.1	6.53
	1963	5.70	11.1	18.4	6.80
	1964	5.53	10.1	19.6	6.42

More patients were conveyed than in previous years, but despite this the average mileage per patient was reduced. This can be attributed to more careful use of the different types of transport available brought about by a more efficient Central Control. The following table shows the figures for the past ten years, and the downward trend compares very favourably with previous years.

Year	Patients conveyed	Mileage	Average mileage per patient
1954	594,166	4,308,453	7.25
1955	628,612	4,341,334	6.91
1956	632,775	4,337,453	6.85
1957	643,542	4,319,136	6.72
1958	693,164	4,376,790	6.31
1959	687,399	4,439,601	6.46
1960	714,902	4,581,779	6.41
1961	722,673	4,564,812	6.32
1962	697,559	4,558,522	6.53
1963	693,589	4,695,566	6.80
1964	734,829	4,715,978	6.42

Non-emergency Cases

The total number of non-emergency patients conveyed in 1964, was 664,632 compared with 625,896 in 1963. The majority of these were taken to clinics or hospital out-patients' departments.

Emergency Cases

During 1964, 70,197 emergency cases were conveyed.

Cost of the Service

The following table, which relates to financial years, shows the total cost of the service, the cost per patient and per mile for the whole service for the last nine years:—

Year ended	Gross expenditure	Cost per patient	Cost per mile
31.3.1956	£ 582,762	s. d. 18 4	s. d. 2 7
31.3.1957	642,811	20 3	2 11
31.3.1958	653,406	20 3	3 0
31.3.1959	673,047	19 3	3 0
31.3.1960	658,905	18 9	2 10
31.3.1961	709,695	19 9	3 0
31.3.1962	810,874	22 8	3 6
31.3.1963	847,295	25 2	3 8
31.3.1964	872,276	24 2	3 7

Major Accident Procedure

The major accident procedure was revised at the end of 1962 in the light of the reorganised arrangements for operational control and copies of the procedure are now in the possession of all hospitals, general medical practitioners and other persons concerned.

Conveyance of Patients by Air

Following the receipt of Ministry of Health Circular 14/64 dated 14th October, 1964, which clarified the arrangements for the use of Service helicopters for the emergency transport of patients in special circumstances arrangements were made for adequate insurance cover to be effected and the necessary undertaking given that the County Council would indemnify the Crown against certain claims.

Future Developments

The difficulties which have previously been referred to, and which are caused by modern driving conditions, continue to increase and this means that emergency journeys are gradually taking longer to accomplish. This, coupled with the fact that there are more accidents, makes it more and more apparent that it may be necessary to increase the establishment of vehicles and staff to deal with the problem. In order to relieve the present situation, vehicles have, as already mentioned, been out-posted at Waltham Abbey and Rochford, whilst the present proposals in the Development Plan of Local Health Services for the period ending 31st March, 1974, provide for additional small ambulance stations to be erected at Chelmsford, Romford, Walthamstow, Abridge, Waltham Abbey, Ardleigh and North Ockendon. These general plans will, of course, be reviewed annually.

In the hospital field the services provided by way of Day Hospitals for mentally ill patients are increasing and at Severalls Hospital, Colchester, which has a large catchment area, the number of patients being conveyed to and from the hospital has risen from about 9 in February to more than 50 at the end of the year, and is expected by the hospital staff to reach 200 within two years.

To deal with these large numbers, the vehicle establishment is being increased by three sitting case vehicles and three additional driver attendants are to be employed.

SECTION VII—THE MENTAL HEALTH SERVICE

Staff

Mr. F. E. A. Kingston, Senior Mental Welfare Officer at the Romford Sub-Office, retired on 20th November, 1964, having served the community for 44 years, being in turn Relieving Officer, District Welfare Officer, Duly Authorised Officer and Mental Welfare Officer. He was succeeded as Senior Mental Welfare Officer by Mrs. J. W. W. Dixon, and her vacancy has been filled by Mr. L. H. Balls, who returned from a similar appointment in London. Mr. R. A. Hill, Mental Welfare Officer, resigned on 31st August, and Mr. N. Hagon was appointed in his place. Four more trainee Mental Welfare Officers were appointed but two of them were unsuccessful in obtaining vacancies on Training Courses and consequently their services were not retained. One of the trainees appointed the previous year was found to be unsuitable to complete the course and his service was also terminated.

Members of the Training Centre staff continued to be seconded to the Diploma Courses organised by the National Association for Mental Health and three of the staff completed these courses in July and, having obtained their Diplomas, were promoted to Assistant Supervisors. Up to the present these courses have been of one year's duration, but the courses approved by the newly established National Council for the Training of Teachers of the Mentally Handicapped will be for a period of two years. The National Association for Mental Health have also introduced two year courses, the one year course being retained for older and more experienced staff. Despite the increased expenditure which results from these developments, it has been decided to continue to second four members of the staff of the Training Centres to attend such courses.

Since July, 1948, Assistant Instructors at Adult Training Centres have received salaries in accordance with the General Division scale of the National Joint Council for Local Authorities Administrative, Professional, Technical and Clerical Services and Senior Assistant Instructors received an additional payment of £50 a year. However, there was no provision whereby Assistant Instructors could benefit immediately upon obtaining the Diploma of the National Association for Mental Health or other approved qualification, or on the completion of a specified period of service. This situation was reviewed during the year and as from 1st October, 1964, the grading applicable to posts of Assistant Instructor became Miscellaneous Grade III/IV, the higher grade being applied to those holding a recognised qualification or having completed four years service in the post. Senior Assistant Instructors will continue to receive an additional £50 a year in respect of their appointments.

After consultation with the Ministry of Health, following the publication of the "Scott" report, and bearing in mind certain difficulties which had arisen at some Training Centres which appeared to be attributable to the need for additional teaching staff, authority was obtained to the ratio of teaching staff to trainees at existing Centres being increased from 1 to 12, to 1 to 10, which involved the creation of 11 additional posts of Assistant Supervisor and 5 additional posts of Assistant Instructor. At the same time, it was agreed that, from 1st October, 1964, the holders of posts at Training Centres designated "Assistant" be promoted to Assistant Supervisor on a personal basis. When these posts become vacant they will be redesignated "Trainee" at the salary scales previously applicable to Assistants, and filled for a period of not more than seven years during which time the holders will be required to obtain a recognised qualification. Approval in principle was also given to a post of Senior Assistant Supervisor or Senior Assistant Instructor being substituted for an existing post of Assistant Supervisor or Assistant Instructor at training centres where there is an average of 50 or more names on the register.

In connection with the training of Training Centre staff, a programme was instituted during the year providing for a series of 16 seminars to be held at various Training Centres, each being attended by six or seven members of the staff. The speakers at the seminars, each of which dealt with a different subject of special interest to the staff, were all members of the County Council's staff, although it is hoped that it may be possible to arrange one or two future seminars in the form of clinical demonstrations at an appropriate hospital.

Wardens and Assistant Wardens of residential hostels for the mentally disordered have received salaries based on those paid to Superintendents and House Parents of Local Authorities' Children's Homes. Difficulties have arisen in appointing suitable persons to these posts and experience has also shown the desirability of appointing, wherever possible, suitably qualified staff. Accordingly approval was given, as from 1st April, 1964, to Wardens and Assistant Wardens who hold a nursing or other appropriate qualification, being paid an additional £50 a year.

It was also found necessary to increase the staff establishment at each of the larger residential hostels by the addition of one post of Assistant Warden (to be filled if necessary by part-time staff to the equivalent of whole-time) in order to ensure adequate staffing to cover periods of leave and other absences.

Care and After-Care

Until recently, Senior Psychiatric Social Workers employed in the Mental Health Service have not been appointed to act as Mental Welfare Officers, although it was envisaged that ultimately they would be so appointed and thus able to carry out the duties of such officers. The position was reviewed towards the end of 1964, and it was considered that if the Senior Psychiatric Social Workers were so appointed they would be able to relieve pressure on the other

Mental Welfare Officers to a certain extent by being able, particularly in respect of patients for whom they personally provide care and after care, to make the necessary applications for compulsory admissions to hospital. The three senior Psychiatric Social Workers concerned were accordingly formally appointed as Mental Welfare Officers but for the time being they are not necessarily taking their places on the duty rota.

Since the inception of the National Health Service in 1948, it has been the practice for a Mental Welfare Officer at each of the Mental Health Sub-Offices to be available day and night to assist medical practitioners, if required, in arranging for the admission of mentally disordered persons to hospital. The officer concerned could be contacted at his office during normal office hours and at his home at evenings and weekends. Each officer at a sub-office took it in turn to act as "duty" officer and arrangements existed whereby general practitioners were furnished with a copy of the duty rota or were advised where they could ascertain the name of the officer on duty should they require assistance. During recent years and more particularly since the Mental Health Act, 1959, came into operation, it has been found that hospitals are indicating a marked preference for admissions to take place during the day, usually informally and frequently on the recommendation of a hospital doctor who has seen the patient at a psychiatric out-patient clinic. In addition compulsory procedures are being used far less and consequently Mental Welfare Officers are becoming less involved in the arrangements for the admission of patients. In the area served by the Colchester Sub-Office, for example, there were only eleven occasions during 1964 on which Mental Welfare Officers were required outside normal office hours, to make application for the admission of a patient to hospital. In view of this it was decided towards the end of the year that in the area served by that particular Sub-Office the practice of having a "duty rota" and a *named* officer on duty should be discontinued for a trial period of three months although one officer will be available at all times. This will mean that if the services of a Mental Welfare Officer are required it will be possible to obtain these during office hours by telephoning the Sub-Office but outside office hours it will be necessary to telephone the home of any of the four officers in the area and if there is no reply another officer must be selected. This is purely in the nature of an experiment to determine whether the duty rota system, which tends to be expensive to operate and onerous for the officers themselves, need continue and the whole matter will be reviewed in the light of experience and taking into account any evidence to show that the new scheme is creating difficulties, particularly so far as general medical practitioners are concerned.

One case under private guardianship ceased to be the responsibility of the County Council during the year, the guardian having given notice, as required by Regulation 11 of the Mental Health (Hospital and Guardianship) Regulations, 1960, that he had removed to the area of another local health authority who therefore became the responsible authority.

Tables are appended giving details of the number of new cases brought to notice during the year and the number receiving community care at the end of the year, indicating the form of care and class of mental disorder. The following table shows the number of visits made by Mental Welfare Officers during 1964 :—

	Number of Visits
Mental Health Act, 1959—Preliminary Visits	1,203
National Health Service Act, 1946—Community Care	11,470
Visits in connection with patients' property	160
Visits to patients in hospital	329
Other visits	7,272
Total ...	<hr/> 20,434 <hr/>

Training Centres

A new Adult Training Centre providing accommodation for 100 trainees was opened at Leytonstone on 14th September, 1964, and as a result the former Centre, which was held in hired premises in Walthamstow, was closed. In addition to the male trainees who previously attended the Walthamstow Centre, the majority of the women attending the Loughton and the Wanstead Centres were transferred to the new Centre and the staff establishments at those Centres adjusted accordingly.

Tenders were received and approved in respect of a new Training Centre to replace the existing Junior Centre at Clacton, which is also held in hired premises, and the necessary orders were placed. At the end of the year construction work was well under way and the new Centre should be in operation in the autumn of 1965. Work also proceeded on the new Adult Training Centres at Chelmsford (100 places) and Dagenham (24 places), both units having been designed to accommodate men and women trainees and specifically for the purpose of enabling industrial work to be undertaken. This concept has been extended to include the categories of staff to be employed and approval has been given to the appointment of a Manager at each Centre, who will be administratively responsible for the efficient running of the Centre, obtaining industrial contracts by approaching and negotiating with outside firms, fixing prices to be paid and allocating suitable work. The Manager will also be responsible for arranging payments to trainees and the overall supervision of the welfare, training and work of the trainees whilst they are at the Centre. In addition there will be a Senior Instructor at each Centre, whose duties will be similar to those of Supervisors at existing Training Centres, except that he will have less administrative responsibility. Neither the Manager nor the Senior Instructor will have any specific duties in relation to groups of trainees, and Instructors will be appointed for this purpose in the ratio of 1 to every 10 trainees on the register. Although there will be an emphasis on the production

of items to a specified standard, the more traditional Centre activities will also continue. In order to simulate industrial working conditions, the new centres have been designed so that midday meals may be prepared, cooked and served on the premises, and the Centres themselves are to remain open from 9.00 a.m. to 4.30 p.m., on five days a week for 48 weeks in the year.

Owing to certain difficulties which arose in connection with the County Council's occupation of hired premises at Loughton for Training Centre purposes; and the fact that it was not possible to renew the lease of these premises, arrangements were made for the Loughton Junior Training Centre to be moved from the previous premises at St. Thomas More Hall, to St. Gabriel's Church Hall, Loughton. This move was carried out during the 1963 Christmas Holiday, and the Centre re-opened in the new premises on 15th January, 1964. The use of this Church Hall for Training Centre purposes is on a temporary basis pending more permanent provision being made in the area.

Terms were agreed during the year and authority was given to purchase a site in Burnside Road, Becontree, for the erection of an Adult Training Centre. Arrangements were also made to use land at Aveley adjacent to the Health Centre, part of which is under the control of the Health Committee and part under the Education Committee, so as to enable an Adult Training Centre to be erected to serve the neighbourhood.

In the latter part of 1963, approval in principle was given to the acquisition of a site in Braintree for the erection of Junior and Adult Training Centres and a Residential Hostel. The negotiations for the purchase of this site have been fraught with many difficulties, owing to planning and access considerations, but by the end of 1964, these negotiations were well advanced and it is confidently hoped that it will be possible to acquire the site in the near future. The Council's Capital Building Programme also includes the provision of a 70-place junior training centre at Loughton to replace the existing centre held in hired premises but having regard to the transfer of certain trainees to the new Leyton Adult Training Centre and the impact that the London Government Act, 1963, could have in 1965, as a result of which it is anticipated that certain of the London Boroughs will provide their own Centres, it was decided that, although such a proposed Training Centre should remain in the Capital Building Programme the number of places to be provided should be reduced to 50.

In conjunction with the Colchester and District Society for Mentally Handicapped Children, a research project is being undertaken at the Colchester Junior Training Centre into the play habits of mentally subnormal children in an environment which is both safe and satisfying to them. In order to make this project possible the Colchester Society have most generously donated a grant of £450 0s. 0d., for special playground equipment and further consideration is to be given to the erection of a play house in the grounds of the Centre to assist in providing the necessary environment and facilities for this study.

The gradual introduction of contract work into existing Adult Training Centres has continued, with particular success at the Romford Adult Training Centre where two or three interesting contracts have been negotiated and carried through with notable success by the trainees under the able direction of the Training Centre staff, as a result of which it has been possible for the trainees to earn acceptable sums of money. Also at this Training Centre and the adjacent Junior Training Centre, owing to the increasing numbers of trainees attending, investigations were carried out with a view to making the best possible use of the places available. As a result arrangements were made for all female trainees over the age of 18 years to be transferred from the Junior to the Adult Centre and male trainees under the age of 18 years who now attend the Adult Centre were transferred to the Junior Centre. This enabled the Junior Centre to concentrate entirely on the younger trainees and the Adult Centre to specialise in the more practical training of adults including basic education, industrial training, woodwork, crafts and general activities such as social training, physical education and gardening, in addition to the industrial activities referred to above.

Similar arrangements were made during 1964, as have been made in previous years for the provision of holidays for trainees at the Junior and Adult Training Centres and three parties have been sent to a holiday camp in Kent, when the weather on the whole was kinder than it had been on previous occasions. All three camps were most successful and were thoroughly enjoyed by the trainees concerned.

Through the good offices of one of the Members of the Mental Health Sub-Committee, and on behalf of the people of Barking, a prefabricated building, approximately 24ft. x 39ft., was donated by the manufacturers and this will provide additional classroom accommodation at the Barking Junior Training Centre. The site works etc., were estimated to cost £1,400 and the Borough Architect of Barking gave his services in connection with the work in a voluntary capacity, the building itself being erected by the firm. There is no doubt that the additional facilities provided by these means will be of very great benefit to the staff and trainees at this Centre. Also at this Training Centre, the Supervisor arranged for a coloured film to be made of a representative day in the life of the training centre. The cost of making this film, which is of excellent quality was met from the private funds of the Centre. The film was seen by the Members of the Sub-Committee who subsequently authorised it to be shown to selected audiences. In view of the considerable interest caused by this film it was subsequently decided that a more comprehensive film should be made of Training Centres and related activities in the Mental Health Service throughout the County. This is to be undertaken by the Health Education Organiser in consultation, where necessary, with the Visual and Aural Aids Service of the County Council's Education Department.

At the present time separate hard-surfaced play areas as well as grassed play areas have been provided for junior and senior trainees in the grounds of all purpose built Junior Training Centres, but experience has shown that the nursery groups which include children with special disabilities, require their own play spaces, including both paved and grassed areas. It was felt that these areas should, as far as practicable, be adjacent to the appropriate classrooms for convenience so that the staff, if necessary, could supervise the activities without leaving the classroom and that for the protection of these classes of pupils, the area should be enclosed by fences with gates large enough to permit the access of wheelchairs and gang mowers. Approval has therefore been given to such enclosed play areas being provided at the Chelmsford, Colchester, Harlow, Romford and Thurrock Training Centres.

Discussions took place during the year with Dr. R. M. Bates, O.B.E., the Medical Superintendent of the Royal Eastern Counties Hospital regarding a proposal put forward by him for the provision of an evening institute for male and female patients from the Hospital, the aim of which would be to encourage active use of leisure time by the provision of classes in various subjects to embrace initially crafts, hobbies and art. Subsequently it is hoped to introduce more ambitious subjects such as mechanics, metal work, beauty culture, basic cooking for men, dancing and possibly music, drama, dressmaking, home decorating and other similar activities. It was also proposed to promote social contacts between patients. The North-East Metropolitan Regional Hospital Board have agreed to finance a pilot scheme on these lines which will provide for 15 male and 15 female patients, the latter to include certain of the residents of Eastwick House, Stanway, one of the County Council's Hostels. It was also agreed that the County Council would provide the necessary accommodation for this project, which will initially be held on one evening a week, at the Colchester Training Centre and it is hoped that the institute will come into operation early in 1965.

It is pleasant to be able to record an increasing amount of assistance and numbers of gifts to Training Centres both by Local Societies for the Mentally Handicapped and other organisations such as Rotary Clubs and Schools, and also from individuals. The amount of effort and sacrifice which is behind these gestures is considerable and the result, particularly in terms of appreciation by the trainees and staff, prove their worth and disprove those critics who have in the past voiced opinions that there is little room in the National Health Service for voluntary effort. It is impossible to give details of all these gifts and measures of assistance but I would like to refer particularly to that small number of volunteers who go regularly to certain of the Training Centres and help the staff in so many ways. I would also like to mention a scheme at the Thurrock Junior Training Centre whereby, during the Autumn term of 1964, six pupils from the William Edwards Secondary School, Stifford Clays Road, Grays, helped each Monday morning at that Training Centre. This arrangement arose from a suggestion by Mr. R. H. Saxton, the Headmaster of the School and it is part of a development course introduced by him for his pupils in

September, 1964. As far as the Centre is concerned the Supervisor has reported that the scheme has been a great success. The pupils have helped the staff in the classrooms in various ways such as dressing and undressing nursery children, threading needles, assisting less able children with jig-saw puzzles, sense training apparatus and handwork, and playing games with the children. At an open day held in the Autumn of 1964, the pupils from the School were very helpful and they also attended the Christmas party at the Training Centre when they helped with games, laying the tables and serving. This development course was designed by the Headmaster with a view to bringing the senior pupils into personal contact with the people, places and problems involved in life outside the school and thereby encouraging a sense of purpose, an awareness of themselves in relation to others and an eagerness to play their part in society.

Provision of Sheltered Workshops

The County Council's ten year development plan includes provision for a 24-place training centre to be erected in the Harlow Area in order to provide training and/or sheltered employment for the mentally ill discharged from hospital. Following discussions which have taken place with the Consultant Psychiatrist at the Harlow Hospital it was evident that there were between 26 and 30 residents in Harlow who, whilst not requiring in-patient treatment for mental illness were not yet sufficiently recovered to enable them to return to full remunerative employment but would benefit from and be capable of work under sheltered conditions. Suitable premises have recently become available at Harlow and at the end of the year negotiations were proceeding for the hire of this property for use as such a sheltered workshop. Approval was given to the necessary adaptations being carried out should these negotiations be successfully completed. Steps are also being taken to create the necessary staff establishment for this project and also to obtain the necessary furniture and equipment.

Residential Accommodation

Two residential hostels each providing 26 places for persons recovering from mental illness were completed during the year. The first known as Havengore is at Council Road, Stanway, and operates mainly in conjunction with Severalls Hospital. The first residents were admitted in December. The second at Harold Hill, Romford, is called Collier Lodge and will be brought into operation early in 1965. For the time being it will cater, in the main, for ex-patients of Warley and Goodmayes Hospitals.

Information was received from the County Welfare Officer at the beginning of the year that arrangements were being made with the North-East Metropolitan Regional Hospital Board for the accommodation used by the Welfare Committee under Part III of the National Assistance Act, 1948, in the "mixed" institutions to be handed over to the Board for hospital purposes in accordance with a phased programme. A number of mentally subnormal persons were in such

accommodation and a preliminary survey showed that there were approximately 20 men and 28 women suitable to live in hostels. As the Welfare Committee were not making any arrangements for the future care of these persons it became necessary to amend the Health Committee's Capital Building Programme in order to provide accommodation for them. In view of the urgency it was decided to adapt Harold Wood Hall, a former children's home, to enable it to be used for accommodating the men for a temporary period of about five years. It is intended that this will operate as an annexe to the existing hostel, Westmarsh Lodge, which is only a short distance away.

So far as the women are concerned a purpose-built hostel was included in the building programme for 1965/66 to be erected in or near Chelmsford although difficulties are being experienced in finding a suitable site.

In the light of information gained by the County Treasurer regarding the actual operating cost of residential hostels provided directly by the County Council, it was agreed by the Council that the existing standard or maximum weekly charge to residents which was previously fixed at £7, should be increased on and from 1st November, 1964, to £12 9s. 8d., at hostels for the mentally subnormal and £11 19s. 9d. at hostels for the mentally ill. So far as Essex residents are concerned, the actual charges made are, of course, subject to assessment according to the means of the individual.

Up to the present time no formal arrangements have been made regarding clothing for mentally subnormal persons who are provided with residential accommodation and requests for articles of clothing for individual patients have been dealt with individually on their merits. However, in view of the number of hostels which the County Council are now operating, it was felt desirable that this matter should be put on a more convenient footing and accordingly a scale of clothing has been approved which, ideally, should accompany the person on admittance and it has been agreed that, where it is not possible for this clothing to be provided by relatives, it should be supplied by the County Council and subsequently maintained at the level of the approved scale. If an adult resident is in employment it has been agreed that he should be required so far as is practicable, to purchase his own replacements of clothing but, where only low wages are earned as is general in these cases and difficulties would be experienced by the resident purchasing major items of clothing such as an overcoat or a suit, it has been agreed that these items should be purchased at the expense of the County Council and arrangements made for the recipient to repay by weekly instalments. Where any resident is in receipt of National Assistance the County Council will maintain the wardrobe. So far as children are concerned clothing will either be provided by the parents or guardians or purchased by the Council and the parents or guardians charged according to their means as determined by the County Council's assessment scales. The question of the necessity for providing clothing for mentally ill persons in residential accommodation is to be considered at a later date.

It was found from experience that it would be advantageous to have more land available for recreational purposes at Eastwick House and Holliwell Lodge which are hostels for subnormal adult women and subnormal children respectively, and which are situated adjacent to each other. When the land to the rear of these hostels became surplus to the requirements of the Welfare Committee, approval was obtained to its appropriation, as a result of which the grounds of both hostels are being extended by approximately 90 feet at the rear.

I have referred previously to the kindness and generosity of individuals and organisations in connection with the County Council's Training Centres and I should emphasise that this applies to residential hostels also. In particular I would like to mention that, during the Christmas Holiday period, personnel from the Headquarters of the 20th Tactical Fighter Wing, United States Air Force, stationed at Wethersfield, provided a Christmas Party at Holliwell Lodge. This is part of a programme called "Christmas Knights" which provided parties and gifts to children in Orphanages and Institutions in the area. When the party was held at the Hostel, Servicemen and their wives provided an excellent meal, waited at table and subsequently organised games. In addition, each child at the Hostel received a generous gift individually wrapped and labelled.

In order to ensure that, as far as possible, residents at hostels for the subnormal are able to enjoy the type of facilities which can be expected in the normal household, the Wardens at Eastwick House, Westmarsh Lodge and Holliwell Lodge have been authorised to arrange suitable outings, film shows and similar functions for residents and a weekly allowance is made for this purpose. A number of outings have been arranged, particularly during the summer months, and there is no doubt that these have been very much appreciated by the residents. In this connection the South Essex Society for Mentally Handicapped Children placed their holiday bungalow in Kent at the disposal of the Warden of Westmarsh Lodge, Romford, for two periods of one week each during the 1964 holiday season so as to enable the residents at that Hostel to be taken away on holiday. This gesture has also been very much appreciated.

During the year approval was given to the hiring for the summer season of a beach hut at Frinton-on-Sea for the use of persons attending Training Centres and residents in hostels, but unfortunately this hiring proved to be somewhat unsatisfactory owing to difficulties of approach to the beach hut and restrictions in the area concerning the parking of coaches. Efforts are accordingly being made to secure a more suitable hut for use during the 1965 season.

Walthamstow and District Association for Mental Health

This Association has recently extended its activities for the benefit of mentally disordered persons in the Walthamstow area and amongst other things has established a social club. In response to an application made on behalf of the Association a grant of £50 has been made to assist in the general activities

of the Association and in this connection it is pleasing to note the close link between the Mental Health Service and the Association in that the Chairman is also a member of the Mental Health Sub-Committee and the Secretary is a Mental Welfare Officer. In addition, three of the Mental Welfare Officers assist in the organisation and running of the social club.

Saffron Walden Teachers' Training College

The Lecturer in Health Education at the British and Foreign Bible Society's Training College for Teachers at Saffron Walden approached the County Council during the year to ascertain whether it would be possible for arrangements to be made for students who live in Essex to help at the County Council's hostels for mentally disordered persons during their holiday period so that they could gain some useful information about the activities of the social services. It was felt that this would prove to be very useful, particularly at the hostel for subnormal children at Holliwell Lodge, during the period when some of the staff are on annual leave, as it would help enable the Hostel to be used to greater advantage. These suggested arrangements have been approved in principle and a party of students have visited both the Colchester Junior Training Centre and Holliwell Lodge to see these establishments in operation but owing to the shortage of time available it was not possible to arrange for any of the students actually to help during the 1964 holiday period. It is hoped, however, that some arrangements may be made in the future.

Retaining Fees

The desirability of making some payment to persons providing residential accommodation in private homes for cases for whom the County Council are financially responsible, during periods when such cases are temporarily absent and the accommodation is retained for them, has been considered. As a result it has been agreed that it would be reasonable to pay a retaining fee amounting to £1 10s. 0d., a week, to include a rental element and the cost of keeping a room aired and cleaned. It was also agreed that the payment of retaining fees, unless otherwise decided in any particular instance, should be for a period or periods not exceeding a total of four weeks in any year.

Clerical Assistance at Mental Health Sub-Offices

A review has been undertaken of the amount and type of work being carried out by the existing staff employed in Mental Health Sub-Offices from which it was clear that the number of persons recovering from mental illness referred for community care following discharge from hospital had increased considerably, which it is considered is due primarily to the employment of qualified psychiatric social workers. The review showed that a considerable proportion of the time of the Senior Psychiatric Social Workers, Senior Mental Welfare Officers and Mental Welfare Officers is spent on work which could be undertaken by clerk/typists, for example, typing returns, letters, reports, etc. The

appointment of clerical staff to undertake this work who would enable the existing officers to spend more time on field work and thus provide economically an increased and better service was approved and a clerk/typist is to be employed at each of the seven Mental Health Sub-Offices.

Training Courses

The County Council's proposed arrangements, as modified and approved by the Minister of Health, for the provision of Mental Health Services, provide that the Council will take whatever measures are necessary, including secondment and in-service training, to ensure that staff of all grades are adequately trained and/or qualified. So far as existing Mental Welfare Officers are concerned it was felt that a weekend refresher course would serve a useful purpose and this was accordingly arranged to take place at the Wansfell Residential College for Adults at Theydon Bois from 7th-9th February, 1964. The title of the course, which was officially opened by the Chairman of the Mental Health Sub-Committee, was "The Role of the Local Authority in the Mental Health Services."

Official Visits

Arrangements were made during the early part of the year for members of the Royal Eastern Counties and the South Ockendon Group Hospital Committees to visit hostel accommodation provided by the County Council, the former visiting establishments in the Colchester area and the latter seeing the hostels at Romford. Subsequently, the Mental Health Sub-Committee accepted invitations from the respective Hospital Management Committees to visit each of the hospitals.

Approval of Medical Practitioners

Six medical practitioners were approved during the year for the purposes of Section 28 of the Mental Health Act, 1959, and at the end of the year a total of 73 approvals had been given by the County Council.

Hospital Admissions

The Mental Welfare Officers continue to assist in arranging admissions to hospitals and during the year were concerned with 635 informal admissions. They were also involved in the following admissions carried out under the compulsory procedures laid down in the Mental Health Act:—

			Applications made by Mental Welfare Officers	Applications made by relatives with the assistance of Mental Welfare Officers
Section 25	...	...	221	55
Section 26	...	...	112	25
Section 29	...	...	481	147

SECTION VIII—REPORT OF THE CHIEF DENTAL OFFICER FOR 1964

Staffing

The professional establishment for all the Dental Services of the County Council is :—

1 Chief Dental Officer

14 Area Dental Officers and

99 Dental Officers.

The number in post at the 31st December, 1964, was equivalent to :—

1 Chief Dental Officer

11 Area Dental Officers (Dagenham, Harlow and South-East Essex were without) and

44·5 Dental Officers.

The average age of the staff was 46 years.

Mr. E. T. Clark, Area Dental Officer, Colchester, has now relinquished his temporary appointment at the London Hospital Dental School, but retains his sessional post at Colchester, by arrangement with the Regional Hospital Board. These contacts are valuable, and are to be encouraged.

In addition, there were on the Committee's staff the equivalent of :—

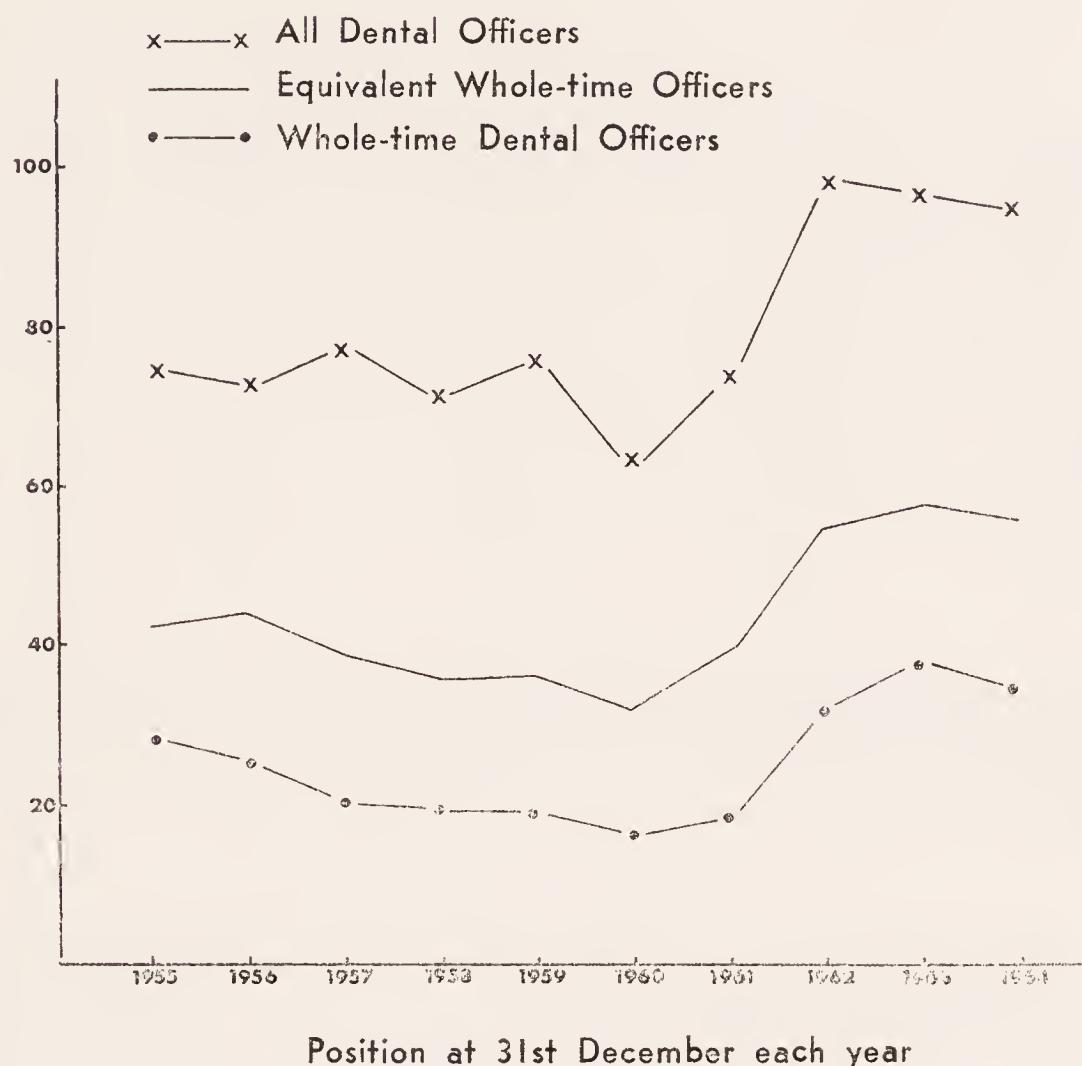
57 Dental Surgery Assistants

5 Dental Technicians and 1 Apprentice and

2 Dental Auxiliary Workers.

The scope of the work embraces the inspection and treatment of school children, expectant and nursing mothers, children under school age, and mentally subnormal children up to 16 years of age who are resident in Hostels under the control of the County Council.

The graph shows the state of the Dental Officer staffing since 1955 :—



The writer continues with extra-mural activities, and attends committee meetings of the General Dental Council, the North-East Metropolitan Regional Hospital Board, the Local Dental Committee of the Essex Executive Council of the National Health Service, and the Essex Branch Council of the British Dental Association, as well as the usual scientific meetings.

The Aim of the Service

The aim of the Local Authority Dental Service is to ensure that, as far as possible, children shall leave school without the loss of permanent teeth, free from dental decay, and trained in the care of the teeth. They should be shown the advantages of a good natural dentition, and be imbued with the enthusiasm to continue their efforts to maintain a healthy mouth. Expectant and nursing mothers should be taught how to pass on this information to their children, and be reminded that, as in most other things, practice here is better than precept.

During the year under review, 171,676 school children were inspected, and this is an increase of over 19,000 on the previous year. Thirteen young persons at the Hostel at Stanway received treatment during the year and made a total of 49 attendances. Details of the work undertaken for mothers and young children are shown on page 45.

Table I shows the demands made on the Service by mothers during 1964 compared with previous years.

Table I

Year	Notified Births	Mothers examined	Percentage examined
1958	28,354	1,557	5.49
1959	28,928	1,487	5.14
1960	30,412	1,359	4.47
1961	30,946	984	3.18
1962	31,948	832	2.60
1963	33,470	1,029	3.07
1964	34,775	1,230	3.54

Table II shows the amount of work undertaken for each 100 patients in the Priority Classes, and it will be seen that the importance attached to conserving the teeth continues.

Table II

Year	Expectant and Nursing Mothers				Pre-School Children	
	Scalings	Fillings	Extractions	Dentures	Fillings	Extractions
1950	30	73	174	23	66	110
1958	39	139	143	23	110	94
1959	44	135	132	20	116	82
1960	43	138	150	18	123	72
1961	65	168	177	24	148	84
1962	57	192	136	22	155	69
1963	84	231	116	17	174	62
1964	82	213	107	19	147	55

Premises and Equipment

Throughout the County, there were 51 premises each with one Dental Surgery, and 23 premises each with multiple surgeries, giving 84 surgeries in all, and at the end of the year 79 of these were in use. New clinics with dental rooms have been opened at Basildon (Wickford), Basildon (Central), Colchester (Monkwick), Chelmsford (Moulsham Lodge), Harold Wood (Gubbins Lane), Harlow (Lister House), and Barking (Woodward). It is interesting to recall that the Woodward Clinic is a replacement for one destroyed by enemy action during the last war.

These purpose-built premises, with their up-to-date and comprehensive equipment are a credit to the Committee, pleasant for the patients, and helpful to the staff. Close liaison with the County Architect's Department in this work is to everyone's benefit.

One hired hall, at Stansted, is still in use, and cannot now be regarded as satisfactory.

Dental Ancillary Workers

The Dentists Act, 1957, Part IV, provides for a trial by the General Dental Council (2 years training and 3 years in the field) of their further class of ancillary workers to be known as Dental Auxiliary Workers. A school was established at New Cross in 1960, and the first five year period will be completed in 1965, when the value of the Auxiliaries to the community will be judged. Information is being accumulated by the General Dental Council by regular reports from Local Authorities on the amount and quality of the work being done by the Auxiliaries, their acceptability, and the economic aspects of their employment.

Three Dental Auxiliaries were employed in the County; one at Leyton, one at Barking, and one at Walthamstow. These young women are trained to extract milk teeth, to fill both milk and permanent teeth, and to undertake Dental Health Education in the surgery and in the schools and clinics. Their training includes some instruction in public speaking.

Other workers who contribute directly to the work of the Dental Surgeons are Dental Technicians, Dental Surgery Assistants, and Dental Hygienists. The scope of the work of the last named is to scale and polish teeth, and apply topical medicaments, as well as undertaking Health Education.

Orthodontics

The last 20 years has been a period of marked advance in orthodontics. As a result of the application of basic research into the growth and development of the structures of the mouth and face, and various influential factors, it has become apparent that the scope of the subject extends beyond the mechanical movement of established irregular teeth. The principles on which the discipline now rests are fundamental, and it is certain that the proportion of the child population who need supervision or treatment is much greater than used to be thought. The dental staff has the advantage of the Consultant Service provided by the North-East Metropolitan Regional Hospital Board, and a number of the Dental Officers have also had considerable experience in this work. In addition, the staffs of the university dental teaching schools are helpful.

Generally the treatment of established cases is the straightening of irregularly placed teeth. The results are often spectacular, and frequently the whole outlook of a child is improved out of all recognition. Discrimination is necessary in choosing suitable patients and parents who will persevere with prolonged treatment.

715 cases were completed during the year, compared with 575 in 1963.

Post-Graduate Study

To keep up to date with the practice of dentistry, attendance by Dental Officers at post-graduate courses is highly desirable. During the year some of the staff were authorised to attend courses arranged by the Eastman Dental Hospital, the Society of Medical Officers of Health, the British Dental Association, and the British Post-Graduate Medical Federation. Instruction in coping with the hazards of dental radiography, from the points of view of both patient and practitioner, was made available to Dental Officers and Dental Surgery Assistants by courtesy of Kodak Ltd.

General Anaesthetics

More and more dental operations tend to be performed under local anaesthesia, but there is still an important place for general anaesthetics in a Local Authority Service. Much of this work is undertaken for school children, but pre-school children and mothers come into the scheme of things as well as occasional mental patients. Everything possible is done to minimise the unpleasantness of this experience. The general anaesthetic machines are modern, and are serviced regularly by the makers. The usual inhalation agents used in the Authority's clinics are nitrous oxide and oxygen gas, and Halothane (fluothane). Special calibrated fittings for the latter are attached to the general anaesthetic machines. This combination of agents is found to be of great use for unpremedicated, ambulant patients. Opportunity is available for attendance for post-graduate instruction by the doctors who perform this highly skilled work, for which great patience is an indispensable asset.

For all the Dental Services of the Authority, 2,197 administrations were performed, made up of 1,283 for school children, 130 for mothers, and 784 for children under school age.

Dental Appliances

The County Council Dental Laboratories at Barking and Walthamstow made a great proportion of the appliances used in the Service, and a sufficient range of equipment is installed to enable nearly all the requirements of the Dental Officers to be met. For instance, a chrome cobalt casting machine has been installed at the Barking Laboratory. Some work is also let out to private dental mechanics to the profession.

During the year, for all the Authority's services, the Dental Officers fitted 435 dentures, along with 1,391 orthodontic appliances and 330 artificial crowns and inlays. Much other work, such as study models for orthodontic cases, appliances to maintain space in the jaws following premature loss of teeth, is also undertaken together with a number of re-lined and repaired dentures.

Epidemiological Studies

The staff of the London Hospital Dental School carried on with their research into the effects on the incidence of dental decay of incorporating certain medicaments into toothpaste. This trial should be completed next year, and the statistical assessment is awaited with interest.

The team from the Royal Dental Hospital, who inspected the teeth of children living in what was the high fluoride area of West Mersea, have also taken photographs of the conditions found there. They are to follow this with inspections and photography of children living in a low fluoride area, such as Saffron Walden. The water supply to West Mersea, since July, is largely one of a low fluoride content, and the permanent record, in colour, of the stained teeth of persons brought up with a high fluoride content (5·8 p.p.m.) water supply will be of lasting interest.

Mental Health Cases

The regular inspection and treatment of the young residents at Holliwell Lodge Hostel, Stanway, Colchester, has now settled into a routine—so far as this work can so settle. It is undertaken as an obligation under the 1959 Mental Health Act, and is carried out by the Area Dental Officer, Colchester. He has the whole-hearted co-operation of the staff of the Hostel, one of whom always accompanies the patients during their attendances at the Shrub End Clinic, Colchester.

Documentation

A new system for statistical returns of work (to be used on a national basis), which was suggested by the Chief Dental Officer of the Department of Education and Science and by the Ministry of Health, has been put in hand, and is now in general use throughout the country, including Essex.

Visits to the Department

Mr. J. P. Cocker, from the General Dental Council, in connection with the employment of Dental Auxiliary Workers;

Mr. J. Rodgers, Dental Officer of the Department of Education and Science, in connection with the School Dental Services in Essex;

Miss Knowles, Miss Hutchison and Mr. Dawson, from the staff of the Department of Education and Science, to see Dental Health teaching in a school; and

Dr. Stosic, Chief Dental Officer of the Ministry of Health of Yugoslavia, to see the County Council's dental scheme.

Dental Health Education

The five-year campaign in Harlow is drawing to a close, and at the time of writing only one Secondary School remains to be visited a second time. Follow-up work will continue until the final dental inspection of children is completed.

The routine of teaching Dental Health, with very little alteration in the light of experience, remains the same; namely high intensity instruction in schools, involving teaching, film shows and all other manner of visual aids. Parent-Teacher Association meetings are arranged, as a rule during the School Weeks, and this work is followed up by short visits to the school. A colour film of the activities at Harlow has been made in co-operation with the Aural and Visual Aids Section of the Education Department.

Teaching has been undertaken in other parts of the County, and many film shows have been given. If Dental Health teaching is undertaken at a school prior to the visit of the Dental Officer for dental inspections, a much better atmosphere and response may be expected.

In my last report I expressed the opinion that contact with Teacher Training Colleges would be a good thing. Following this we have visited the Saffron Walden Teachers' Training College, where we held a full scale Dental Health Week with the help of a class from a neighbouring primary school and there were some interesting discussions with the College students. At the Brentwood Training College, again with the help of a class of children, a demonstration lesson was given to the students over closed circuit television.

For some time all the ante-natal classes at Harlow have been visited, and talks, film shows and demonstrations given. There has been first class co-operation from the Health Visitors and Midwives concerned, and this, it is hoped, may mean an improvement in the teeth of new entrants to school.

The sale of toothbrushes continued to children attending the clinics, and there was again a Dental Health section in the Health Department's exhibit at the Essex Agricultural Show.

All this teaching leads up to four rules for Dental Health :—

- (1) Eat nourishing meals and nothing sweet and sticky in between;
- (2) Finish meals with raw fruit or vegetables or rinse the mouth with water;
- (3) Brush teeth and gums regularly after breakfast and always last thing at night;
- (4) Have regular dental inspections.

The argument behind these rules is that highly fermentable sugars, such as are found in biscuits and toffees, cling to the teeth; these sugars then suffer a degradation to acid, and this acid attacks the teeth. A dissolution of tooth substance then occurs, and the process of decay has begun. If this is not arrested by cleansing the teeth, either with a brush, or by cleansing foods such as raw fruit or vegetables, then the trouble is progressive.

The sale of biscuits in school shops, especially with the mid-morning milk, is directly against this teaching. No doubt the financial gain from these sales can be accurately computed, but the price in misery, premature loss of teeth, and fees for treatment, is difficult to reckon.

Fluoridation of Water Supplies

I reported on this much debated subject in some detail last year, and I am making some general remarks in Appendix A to this Report.

Conclusion

There is more awareness of the benefits of attaining a healthy mouth and the discipline needed to attain this end. The problem is to translate this knowledge into practice. Difficulties can, however, be the source of inspiration and endeavour!

J. BYROM

APPENDIX A

Fluoridation of Water Supplies

In my last Report I gave some statistical evidence of the beneficial effect which comes from adding a fluoride (up to 1 p.p.m.) to those water supplies otherwise deficient in fluoride content. This year I would like to make one or two more general remarks about this highly controversial question.

The purpose of fluoridation is to make generally available the protection from dental decay which is enjoyed in those areas already having fluoride naturally occurring in their water at about 1 p.p.m. Persons brought up in such areas generally possess teeth of better appearance, and with greater resistance to decay, than in areas lacking in fluoride. Dental decay is a serious problem in this country. It normally begins in childhood, and by the time children enter school, four out of five have some decayed teeth. In 1963, amongst children aged 5 to 17 years in England and Wales alone, over $9\frac{1}{2}$ million fillings were inserted in permanent teeth, and over $1\frac{1}{2}$ million teeth were extracted.

The fluorides used in this process are inorganic salts, which, when dissolved in water, dissociate into particles known as ions. Thus: calcium fluoride or sodium fluoride, when added to water, give calcium or sodium ions and fluoride ions, and the fluoride ions so produced are identical in all their properties with those occurring naturally in water. These inorganic fluoride salts are manufactured in a pure state from fluoride minerals which occur in the earth's crust. They must not be confused with organic compounds of fluorine, nor with the element fluorine, which is a gas. Fluorides are widespread in nature, and are present as a constituent in almost all drinking waters, wherein the concentration of fluoride ions can vary from a trace (less than 0·2 p.p.m.) to several parts per million. They are present in most foods and beverages, and in the human body they are an inevitable constituent of the blood, teeth and bones.

Children born and brought up in areas where the water actually contains fluorides at about the level of 1 p.p.m. have been found to have less than half the dental decay experienced by children in areas where there is only a trace of fluoride. Their teeth are well formed and of good appearance, and research has shown that these benefits persist throughout most of their adult life.

Some people have expressed concern about the possible effects of fluorides on health. The complete safety of fluorides at the level used in the fluoridation of water supplies has, however, been shown, in various ways. People living in areas with as much fluoride, or more, naturally in their water supplies enjoy normal health, and studies have failed to reveal any adverse effect which can be attributed to the presence of fluoride.

Rarely, if at all, has any health measure been the subject of so much study and research. Every allegation of harm has been painstakingly assessed. The safety of the measure has been placed beyond doubt.

The connection between improved dental health and the presence of an adequate level of fluoride in the water supply has been understood for about 20 years. Soon after the connection was established, several communities in North America decided to give their children the benefit of adequate fluoride by arranging for enough to be added to their water supply to adjust the amount already present to about 1 p.p.m., the optimum level for temperate climates. Fluoridation, therefore, consists of the adjustment to the optimum level, for dental protection, of the fluoride content of those water supplies which are deficient in it naturally. In all other respects, the water supply to which the recommended amount of a suitable fluoride salt has been added is identical with a supply which contains the same proportion of fluoride naturally. Studies have shown that drinking water which has had its fluoride content raised to 1 p.p.m. has the same beneficial effect on teeth as water in which the same proportion of fluoride is present naturally.

Among young people who have had fluoridated water all their lives, dental decay is substantially reduced, sometimes by half, or even more. On the other hand, however, fluoridation will have little effect on those who are already adult when it is introduced. Children will benefit, broadly, according to the age at which they first regularly begin to consume fluoridated water with their food and drink, and, preferably this should be at birth.

The fluoridation of water supplies is being increasingly practised in many parts of the world. It was first introduced into North America in 1945, and by 1964 some 50 million people in the United States and Canada were drinking fluoridated water. In this country, fluoridation began in 1955, and in 1962 the Minister of Health announced he was ready to approve its general introduction by Local Health Authorities. An Act of the Irish Parliament has enabled the general fluoridation of water to be started in that country. Australia and New Zealand are amongst the many other countries in which some water supplies are now fluoridated. Many of the major cities of the world have adopted this policy, including Birmingham (England), New York, Washington, Chicago, Toronto, Dublin, Canberra, Sydney and Wellington.

The following professional and Local Authority organisations in this country unreservedly support fluoridation :—

- The General Dental Council
- The British Dental Association
- The British Medical Association
- The Society of Medical Officers of Health
- The County Councils Association
- The Association of Municipal Corporations
- The Royal Society of Health.

Various methods, other than the addition of fluoride to water, have been suggested and tried. They include taking fluoride tablets, painting the teeth with fluoride solution, using fluoride mouthwash or toothpaste, and taking specially fluoridated foods, but no method of coping with dental decay has been shown to be as effective or convenient as the fluoridation of water. Some of the alternative methods can involve complicated arrangements requiring a degree of persistence and supervision over a period of many years which it would be unreasonable to expect. The fluoridation of water supplies, however, is a safe and certain way of providing children with adequate amounts of fluoride during the formation of their teeth, and this at a relatively small cost.

The methods of adding predetermined amounts of fluoride to water do not in themselves present great difficulties, but other complications can arise in some areas. For instance, of the several Water Undertakings in Essex, one, The Lee Valley Water Company, serves 33 Local Authorities in 800 square miles, and has to draw on many different sources of water supply.

J. BYROM

APPENDIX B

CONGENITAL MALFORMATIONS, 1964

The number of children observed at birth to be suffering from congenital malformation and recorded on Forms S.D. 56 during 1964 was 475. This represented 1·35 per cent. of the notified births during the year. The following table shows the figures for Health Areas/County Districts:—

Health Area/County District	Notified Births	Cases of congenital malformation	Percentage
Colchester M.B.	1,355	19	1.40
North-East Essex	2,403	28	1.17
Mid-Essex	5,385	68	1.26
Basildon U.D.	2,369	19	0.80
South-East Essex	2,450	32	1.31
South Essex	5,639	92	1.63
Harlow	1,562	9	0.58
Forest	3,186	47	1.48
Romford	1,806	25	1.38
Barking	1,094	10	0.91
Dagenham	1,537	21	1.37
Ilford	3,015	56	1.86
Leyton	1,620	22	1.36
Walthamstow	1,856	27	1.45
Administrative County	35,277	475	1.35

The percentage of children reported as malformed varied from less than 0·6 per cent. in Harlow to over 1·8 per cent. in Ilford. A formal test of significance shows that the percentage was significantly low in Harlow and Basildon but elsewhere not significantly different from a common value of 1·43 per cent. The low rate in Basildon was largely due to the fact that no cases were reported during the first three months of the year. In Harlow on the other hand there were only two cases reported in the last six months of the year. It seems more likely that the low percentage figures in Harlow and Basildon are due to under-reporting than to a low rate of malformations in these urban districts. The figures generally are probably too small to show up any real differences in the incidence of congenital malformations in different parts of the County.

Type of Malformation and Sex

The following Table summarises the number of each type of malformation recorded:—

Code No.	Defect	No. of defects			Defects per 1,000 births		
		M.	F.	Total	M.	F.	Total
01	Anencephalus	10	14	24	0.55	0.81	0.68
04	Hydrocephalus	16	21	37	0.89	1.22	1.05
08	Spina bifida	20	31	51	1.11	1.80	1.45
00, 02, 03	Other defects of central nervous system	4	12	16	0.22	0.70	0.45
05-07, 09	Defects of eye	2	5	7	0.11	0.29	0.20
10-15	Defects of ear	7	7	14	0.39	0.41	0.40
21	Cleft lip	23	9	32	1.28	0.52	0.91
22	Cleft palate	22	16	38	1.22	0.93	1.08
	Other defects of alimentary system	9	9	19*	0.50	0.52	0.54
20, 23-29	Defects of heart and great vessels	14	12	26	0.78	0.70	0.74
30-39	Hypospadias, epispadias	26	—	26	1.44	—	0.74
56	Other defects of male genitalia	13	—	13	0.72	—	0.37
57	Other defects of urogenital system	8	5	14*	0.44	0.29	0.40
62	Reduction deformities	5	5	10	0.28	0.29	0.28
63	Polydactyly	15	10	25	0.83	0.58	0.71
64	Syndactyly	4	7	11	0.22	0.41	0.31
66	Talipes	43	65	108	2.38	3.77	3.06
68	Defects of hand	4	9	13	0.22	0.52	0.37
60, 61, 65,	Other and unspecified defects of limbs	11	20	31	0.61	1.16	0.88
67, 69	Other skeletal defects	3	8	11	0.17	0.46	0.31
83	Vascular defects of skin, etc.	3	8	11	0.17	0.46	0.31
84	Other defects of skin	7	6	13	0.39	0.35	0.37
89	Exomphalos, omphalocele	4	7	11	0.22	0.41	0.31
96	Mongolism	10	12	22	0.55	0.70	0.62
40-49, 80-82, 85-88, 92-95	Other specified defects	11	12	24*	0.61	0.70	0.68
90, 91	No specified defect recorded	1	3	4	0.06	0.17	0.11
	Total Children	232	241	475*	12.86	13.98	13.46
04 & 08	Hydrocephalus and spina bifida	10	12	22	0.55	0.70	0.62
21 & 22	Cleft lip and cleft palate	15	7	22	0.83	0.41	0.62

* Including one or more of unknown sex.

In this table children with multiple malformations are included under each malformation recorded and details of the two most frequent combinations of defects are given at the foot of the table. The final column of the table gives the incidence rate per 1,000 births and these figures may be compared with national figures when published or figures for other authorities, but it should be noted that many are based on few defects and are liable to relatively large variation due to chance alone. For the same reason, too much importance should not be given to differences between male and female rates. In fact the only sex differences which are significant at the 0·05 per cent. level are the male excess for cleft lip and the female excess for talipes. In spite of the fact that each type of malformation of the central nervous system shows a female excess, when taken together they do not quite reach statistical significance.

Monthly Variation

For a study of factors other than sex, many of the groups in the previous table are too small. Accordingly, some have been omitted and others combined to give ten main malformation groups. The following table gives details of these groups and the numbers of each reported each month of 1964 :—

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
encephalus(01)	1	3	3	2	3	—	2	2	1	3	3	1	24
drocephalus and spina	7	6	9	4	7	9	5	2	4	7	2	4	66
spina bifida(04,08)													
ft lip and cleft palate	7	4	10	4	2	4	5	4	4	3	—	1	48
21, 22)													
ects of heart and great vessels(30-39)	1	3	3	3	1	2	3	—	4	2	1	3	26
ects of male genitalia	5	1	7	3	1	3	3	2	2	2	5	4	38
56, 57)													
ydactyly, syndactyly	4	3	5	3	4	7	—	1	2	3	1	1	34
63, 64)													
pes(66)	12	11	9	9	10	9	10	10	6	4	8	10	108
er limb defects(60-62, 65, 7-69)	5	5	13	6	4	3	4	3	1	2	2	1	49
ects of skin(83, 84)	2	4	5	3	3	2	—	1	2	2	—	—	24
higolism(96)	4	1	2	5	2	—	1	3	1	—	2	1	22
defects	50	41	58	45	36	44	37	34	35	35	30	30	475

The total number of malformed infants reported decreased throughout the year from 1·65 per cent. of births in the March quarter to 1·45, 1·23 and 1·14 per cent. in the June, September and December quarters. This is much too large a variation to be ascribed to chance and must either be caused by a seasonal difference for some malformations or a decline in the completeness of reporting during the year or both.

When defect groups were analysed by quarter it was found that cleft lip and palate, polydactyly and syndactyly, "other" limb defects and defects of the skin had distributions by quarter significantly different from what would be expected if the reported incidence of these conditions had been the same throughout the year. The figures for hydrocephalus and spina bifida did not quite reach statistical significance, but when they were examined separately it was found that most of the seasonal variation was in cases of spina bifida and for this condition alone there was a significant difference between the incidence in each quarter. Similarly it was found that most of the seasonal differences in the cleft lip and palate group was due to cleft lip. The total number of cases may then be sub-divided into those with malformations showing a definite seasonal pattern and those without, giving the following:—

	Quarter ended			
	31.3.64	30.6.64	30.9.64	31.12.64
Spina bifida, cleft lip, limb defects except talipes and skin defects	77	54	33	19
Others	72	81	73	76
All cases	149	135	106	95

In January and February, 1965, the number of malformed children reported were 43 and 38 respectively. Cases of spina bifida and cleft lip were at a similar level to that in January and February, 1964, but limb defects (except talipes) and skin defects were at the much lower level reached at the end of 1964. Whether this lower incidence is real or due to less complete recognition and reporting of these types of malformations at birth is uncertain.

Maternal age and parity

There are no available figures for births in the County by maternal age or parity. The numbers in each maternal age group have therefore been estimated using the latest published figures for Greater London and the Eastern Region and the number at each parity from the latest national figures.

No statistical difference could be demonstrated between the incidence of all types of malformation at different maternal ages and the only defect groups where such a difference could be demonstrated were Defects of the Skin and Mongolism. The figures for children with these defects and all defects are given in the following table:—

Maternal age	Defects of Skin		Mongolism		All defects	
	No.	Rate per 1,000 births	No.	Rate per 1,000 births	No.	Rate per 1,000 births
Under 20	6	2.2	2	0.7	39	14.1
20-24	9	0.5	5	0.5	128	11.8
25-29	7	0.6	2	0.2	146	13.2
30-34	2	0.3	4	0.6	92	13.9
35-39	—	—	4	1.3	53	17.0
40 and over	—	—	5	5.3	17	18.2
All ages	24	0.7	22	0.6	475	13.5

For parity, no defect group had a distribution significantly different from that for all defects and the latter showed no significant difference in incidence rates at different parities. The figures for all defects are as follows:—

	Number of previous live and stillbirths						
	0	1	2	3	4	over 4	Any
Number	180	127	74	44	20	25	470*
Rate per 1,000 births	14.0	11.9	12.9	16.0	14.9	16.3	13.5

* Parity was not stated for five cases. They have been rateably distributed in parity groups for the calculation of the rates.

Stillbirths

Of the 475 infants with reported malformations, 51 (or about 11 per cent.) were stillborn. Twenty-two of them were males, 27 females and for two the sex was not given. Twenty of the stillbirths had anencephalus and 12 hydrocephalus. Five had cleft lip and cleft palate. The remainder were well distributed among the other defects.

W. H. LEAK
Statistician

TABLE I—BIRTHS, DEATHS, ANNUAL RATES, ETC., 1964

Health Area and County District	Estimated mid-year population		Estimated Net Migration	Live Births No.	Live Births Rate*	Deaths No.	Deaths Rate*	Infant Deaths No.	Infant Deaths Rate†	Stillbirths	Death under 1 week	Perinatal Mortality Rate‡
	1963	1964										
Colchester B.	67,430	68,290	+ 395	1,283	18.8	818	12.0	29	23	24	21	34
Harwich B.	13,810	14,150	+ 231	262	18.5	153	10.8	2	8	3	2	19
Brightlingsea U.	4,950	5,110	+ 143	93	18.2	76	14.9	3	32	—	3	32
Clacton U.	29,420	30,780	+ 1,481	427	13.9	548	17.8	7	16	6	2	18
Frinton and Walton U.	9,900	10,770	+ 934	131	12.2	195	18.1	3	23	3	1	30
Halstead U.	6,590	6,650	+ 8	126	18.9	74	11.1	1	8	1	1	16
West Mersea U.	3,160	3,250	+ 86	47	14.5	43	13.2	1	21	1	—	21
Wivenhoe U.	3,300	3,630	+ 259	106	29.2	35	9.6	2	19	5	1	54
Halstead R.	16,400	16,620	+ 161	284	17.1	225	13.5	5	18	3	3	21
Lexden and Winstree R.	23,930	25,380	+ 1,287	473	18.6	310	12.2	8	17	4	4	17
Tendring R.	25,340	25,790	+ 356	455	17.6	361	14.0	7	15	6	5	24
North-East Essex	136,800	142,130	+ 4,946	2,404	16.9	2,020	14.2	39	16	32	22	22
Chelmsford B.	52,230	52,920	+ 33	1,131	21.4	474	9.0	6	5	13	5	16
Maldon B.	10,990	11,330	+ 265	242	21.4	167	14.7	3	12	1	1	8
Saffron Walden B.	8,350	8,650	+ 268	148	17.1	116	13.4	6	41	2	5	47
Braintree and Bocking U.	20,970	21,060	— 86	428	20.3	252	12.0	9	21	8	3	25
Burnham-on-Crouch U.	4,200	4,310	+ 110	70	16.2	70	16.2	—	—	3	—	41
Witham U.	9,860	10,190	+ 267	171	16.8	108	10.6	2	12	9	—	50
Braintree R.	23,100	23,910	+ 599	429	17.9	218	9.1	10	23	7	5	28
Chelmsford R.	51,600	53,830	+ 1,686	1,133	21.0	589	10.9	17	15	15	11	23
Dunmow R.	21,160	21,900	+ 536	405	18.5	201	9.2	7	17	5	4	22
Maldon R.	16,450	17,090	+ 493	330	19.3	183	10.7	5	15	11	4	44
Saffron Walden R.	18,140	18,440	+ 201	310	16.8	211	11.4	5	16	3	4	22
Mid-Essex §	237,050	243,630	+ 4,372	4,797	19.7	2,589	10.6	70	15	77	42	24
Basildon U.	99,580	103,110	+ 1,883	2,387	23.2	740	7.2	55	23	30	28	24
Benfleet U.	36,420	38,740	+ 1,808	903	23.3	391	10.1	10	11	11	8	21
Canvey Island U.	18,110	19,350	+ 1,067	394	20.4	221	11.4	3	8	6	3	22
Rayleigh U.	20,290	21,800	+ 1,314	401	18.4	205	9.4	5	12	4	2	15
Rochford R.	34,240	35,140	+ 571	768	21.9	439	12.5	13	17	15	8	29
South-East Essex	109,060	115,030	+ 4,760	2,466	21.4	1,256	10.9	31	13	36	21	23
Brentwood U.	52,930	54,230	+ 848	1,005	18.5	553	10.2	25	25	14	18	31
Hornchurch U.	133,380	134,140	— 551	2,483	18.5	1,172	8.7	38	15	43	21	25
Thurrock U.	117,150	118,390	+ 51	2,091	17.7	902	7.6	29	14	40	13	25
South Essex	303,460	306,760	+ 348	5,579	18.2	2,627	8.6	92	16	97	52	26
Harlow U.	61,140	63,540	+ 1,100	1,551	24.4	251	4.0	21	14	19	15	22
Chingford B.	46,230	46,320	— 92	604	13.0	422	9.1	12	20	9	6	24
Wanstead and Woodford B.	61,360	61,870	+ 304	891	14.4	685	11.1	15	17	11	11	24
Chigwell U.	62,240	62,650	+ 71	809	12.9	470	7.5	12	15	19	8	33
Epping U.	10,070	10,370	+ 212	177	17.1	89	8.6	5	28	5	4	49
Waltham Holy Cross U.	12,150	12,390	+ 73	260	21.0	93	7.5	6	23	5	4	34
Forest §	192,050	193,600	+ 568	2,741	14.2	1,759	9.1	50	18	49	33	29
Epping and Ongar R.	38,500	39,500	+ 543	798	20.2	341	8.6	6	8	19	5	29
Romford B.	115,960	115,610	— 1,370	1,886	16.3	866	7.5	30	16	35	16	27
Barking B.	72,070	71,510	— 875	1,056	14.8	741	10.4	20	19	17	10	25
Dagenham B.	108,950	107,060	— 2,455	1,500	14.0	935	8.7	34	23	26	24	32
Ilford B.	176,550	175,490	— 2,117	2,994	17.1	1,937	11.0	37	12	29	21	17
Leyton B.	92,550	91,420	— 1,359	1,576	17.2	1,347	14.7	29	18	15	21	23
Walthamstow B.	107,260	106,100	— 1,744	1,779	16.8	1,195	11.3	27	15	17	15	18
ADMINISTRATIVE COUNTY	1,918,420	1,942,780	+ 8,985	34,797	17.9	19,422	10.0	570	16.4	522	346	24.6
Administrative County, 1963	—	—	+ 9,887	33,561	17.5	20,628	10.8	589	17.6	537	365	26.5

* per 1,000 estimated population

† per 1,000 live births

‡ per 1,000 total births

§ excluding that part of Epping and Ongar R.D. in the Area. Estimated mid-1964 populations for complete Health Areas are: Mid-Essex; 263,480; Forest: 213,250.

TABLE II—CAUSES OF DEATH BY AGE, 1964

	Male									Female										
	0-	15-	25-	35-	45-	55-	65-	75-	Total	0-	15-	25-	35-	45-	55-	65-	75-	Total		
1. Tuberculosis—respiratory	—	—	1	5	7	14	20	17	64	—	—	—	—	2	4	3	2	11		
2. Tuberculosis—other	—	1	1	—	—	2	—	—	4	1	—	—	1	—	1	—	2	2		
3. Syphilitic disease	—	—	—	—	—	5	6	7	18	—	—	1	—	2	1	4	4	12		
4. Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
5. Whooping Cough	—	4	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—		
6. Meningococcal infections	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—		
7. Acute poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8. Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
9. Other infective and parasitic diseases	—	1	—	—	1	6	1	2	11	6	—	1	1	4	3	2	2	19		
10. Malignant neoplasm, stomach	—	—	1	8	39	76	91	70	285	—	—	—	5	10	33	48	94	190		
11. Malignant neoplasm, lung and bronchus	—	—	1	3	24	99	317	316	905	—	—	—	1	10	33	51	61	187		
12. Malignant neoplasm, breast	—	—	—	—	1	—	1	1	4	—	—	9	30	90	98	92	80	399		
13. Malignant neoplasm, uterus	—	—	—	—	—	—	—	—	—	—	2	10	30	25	41	32	140	—		
14. Other malignant and lymphatic neoplasms	—	14	9	17	44	87	216	302	989	7	10	13	50	92	186	259	352	969		
15. Leukaemia and aleukaemia	—	13	3	1	6	5	19	10	73	6	—	4	5	4	7	12	11	49		
16. Diabetes	—	2	—	—	—	4	11	19	52	—	—	1	1	4	14	40	38	98		
17. Vascular lesions of nervous system	—	—	2	4	11	42	132	299	978	—	—	2	15	52	131	385	1,089	1,674		
18. Coronary disease, angina	—	—	1	3	80	269	663	731	2,451	—	—	12	36	184	523	838	1,593	—		
19. Hypertension with heart disease	—	—	—	—	—	7	20	39	107	—	—	—	—	14	44	118	176	—		
20. Other heart disease	—	—	1	1	3	11	35	64	133	413	661	4	1	3	15	32	50	152	814	1,071
21. Other circulatory disease	—	—	—	1	—	11	23	67	116	178	396	1	3	1	4	20	43	99	305	476
22. Influenza	—	—	—	1	1	—	1	1	6	4	14	—	—	1	—	2	9	12	—	
23. Pneumonia	—	47	5	3	2	17	54	132	554	24	1	3	8	17	26	103	441	623	—	
24. Bronchitis	—	11	—	1	5	25	115	288	763	16	—	1	5	23	73	157	275	—	—	
25. Other diseases of respiratory system	—	—	1	2	1	6	26	39	101	7	2	—	2	7	11	30	61	—		
26. Ulcer of stomach and duodenum	—	—	—	1	—	5	18	30	80	—	—	—	3	2	10	24	39	—		
27. Gastritis, enteritis and diarrhoea	—	7	—	—	2	1	7	8	36	5	—	1	1	5	13	39	65	—		
28. Nephritis and nephrosis	—	2	2	2	4	7	10	14	52	—	2	4	2	3	10	17	9	47		
29. Hyperplasia of prostate	—	—	—	—	—	—	2	13	57	—	—	—	—	—	—	—	—	—		
30. Pregnancy, childbirth, abortion	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4		
31. Congenital malformations	—	82	2	4	—	1	1	3	96	75	4	1	3	—	3	—	3	89		
32. Other defined and ill-defined diseases	—	—	—	—	—	—	—	—	—	157	11	8	39	44	102	156	380	897		
33. Motor vehicle accidents	—	195	11	4	21	43	97	111	654	12	12	1	3	8	8	14	10	68		
34. All other accidents	—	12	49	20	18	17	31	12	178	13	5	1	8	2	16	23	120	188		
35. Suicide	—	21	19	16	18	15	24	26	35	—	4	13	15	19	27	14	10	102		
36. Homicide and operations of war	—	1	6	13	14	16	20	11	91	5	—	1	—	—	—	1	7	—		
All causes	—	419	117	102	288	771	2,019	2,778	3,384	9,878	339	58	72	241	516	1,073	2,201	5,044	9,544	
All causes	1963	465	121	126	256	822	2,021	2,901	3,886	10,598	323	50	83	209	471	1,155	2,362	5,377	10,030	
All causes	1962	442	116	354	—	2,778	2,869	3,705	10,264	—	308	42	292	—	1,661	2,238	5,140	9,681		
All causes	1961	431	105	400	—	2,668	2,703	3,580	9,887	—	327	45	294	—	1,615	2,221	5,029	9,531		
All causes	1960	432	97	351	—	2,559	2,616	3,258	9,313	—	312	40	309	—	1,536	2,070	4,769	9,036		
All causes	1959	456	110	390	—	2,678	2,673	3,393	9,700	—	330	31	265	—	1,581	2,085	4,735	9,027		

TABLE III—CAUSES OF DEATH BY HEALTH AREAS AND COUNTY DISTRICTS, 1964

Health Area and County District	Tuberculosis respiratory	Tuberculosis other	Syphilitic disease	Other infective and parasitic diseases*	Malignant neo- plasm, stomach	Malignant neo- plasm, lung and bronchus	Malignant neo- plasm, breast	Malignant neo- plasm, uterus	Other malignant and lymphatic neoplasms	Leukaemia and aleukæmia	Diabetes	Vascular lesions of nervous system	Coronary disease angina	Other heart and circulatory diseases	Influenza	Pneumonia	Bronchitis	Other diseases of respiratory system	Ulcer of stomach and duodenum	Gastritis enteritis and diarrhoea	Nephritis and nephrosis	Hypertension of prostate	Pregnancy childbirth abortion	Congenital malformations	Other disease* and homicide	Motor vehicle accidents	All other accidents	Suicide	All causes	
Colchester B	1	—	1	3	25	28	13	4	79	4	7	142	190	115	1	56	28	11	10	2	2	3	—	7	59	10	9	8	818	
Harwich B	—	—	1	—	—	4	9	1	1	19	—	—	39	34	19	—	5	7	1	—	—	—	—	1	9	—	3	—	153	
Brightlingssea U	—	—	—	—	2	3	2	1	6	1	—	—	12	15	15	—	4	4	—	1	—	—	—	7	—	2	1	—	76	
Clacton U	1	—	1	1	21	24	6	4	43	3	5	78	133	107	1	14	25	8	2	5	3	1	—	3	39	5	10	5	548	
Frinton & Walton U	—	—	—	—	3	13	5	—	26	1	3	25	40	34	4	11	11	—	1	2	—	—	—	—	10	3	1	3	195	
Halstead U	—	—	—	—	6	2	—	1	2	—	—	8	20	11	—	4	3	—	—	—	—	—	—	10	3	1	3	74		
West Mersea U	—	—	—	—	—	1	1	—	3	1	3	12	7	2	—	5	2	—	—	—	—	—	—	1	4	1	—	—	43	
Wivenhoe U	—	—	—	—	10	10	3	1	31	—	2	30	45	29	—	23	2	2	4	—	1	—	—	2	4	1	—	—	35	
Halstead R	—	—	—	—	3	3	14	6	3	40	3	4	42	49	57	—	13	15	—	1	5	1	—	1	16	3	5	5	225	
Lexden and Winstree R	—	—	—	—	3	3	13	5	3	46	—	9	84	85	46	—	19	10	3	3	1	3	2	—	17	5	3	3	310	
Tendring R	—	—	—	—	1	3	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	3	3	3	361	
North-East Essex	1	1	2	5	53	91	30	14	220	9	26	334	435	325	5	98	80	15	13	13	8	9	—	9	152	16	35	21	2,020	
Chelmsford B	2	—	—	—	11	30	11	5	48	1	4	61	109	76	—	21	16	7	5	3	2	3	—	5	29	4	13	9	475	
Maldon B	—	—	—	—	2	8	5	—	19	1	2	27	37	23	—	17	10	2	—	1	—	—	2	4	—	4	2	167		
Saffron Walden B.	1	—	—	—	1	6	4	1	6	1	3	14	18	9	1	15	9	1	1	2	—	2	14	—	5	1	116			
Braintree & Bocking U	1	—	1	—	5	12	4	—	18	—	1	46	64	31	—	21	13	4	1	2	—	3	20	1	3	1	252			
Burnham-on-Crouch U	—	—	—	—	1	—	7	—	1	—	13	22	5	—	4	3	1	1	—	1	—	—	5	—	2	2	70			
Witham U	1	—	—	—	3	7	—	—	11	1	1	17	25	12	—	5	2	—	1	—	—	2	15	2	2	—	108			
Braintree R	—	1	—	—	—	8	2	1	20	6	1	35	50	33	—	12	15	1	2	—	3	1	—	3	15	4	3	2	218	
Chelmsford R	2	—	—	1	11	28	7	4	58	5	3	82	134	69	2	51	26	6	3	2	1	—	6	53	9	18	4	588		
Dunmow R	—	—	1	—	4	4	4	1	20	—	1	24	45	26	—	12	15	5	2	2	4	—	2	16	6	4	1	201		
Maldon R	—	—	1	—	4	10	5	4	18	2	—	21	41	29	—	9	8	—	2	1	—	3	19	2	1	1	183			
Saffron Walden R	—	—	—	1	6	5	3	2	23	2	1	27	42	30	—	15	13	3	—	1	1	—	2	21	6	5	1	211		
Mid-Essex †	7	1	3	2	47	119	46	18	248	19	18	367	587	343	3	182	130	32	16	11	15	16	—	30	211	34	60	24	2,589	
Basildon U	3	—	2	1	20	35	19	7	75	6	5	101	170	83	—	55	29	6	2	5	1	2	—	16	66	13	12	6	740	
Benfleet U	1	—	—	2	12	18	9	1	42	2	2	68	78	53	1	21	20	3	2	4	2	1	4	25	5	8	5	391		
Canvey Island U	1	—	—	—	4	17	—	1	16	1	1	33	50	24	1	13	15	2	1	2	3	—	22	3	7	2	221			
Rayleigh U	1	—	2	1	3	12	4	1	16	—	3	39	46	25	—	6	11	1	—	2	—	6	17	5	1	3	205			
Rochford R	1	—	—	2	5	19	5	3	45	1	3	126	87	40	1	15	24	2	3	4	—	—	2	34	4	7	3	439		
South-East Essex	4	—	2	5	24	66	18	6	119	4	9	266	261	142	3	55	70	8	6	9	10	5	1	12	98	17	23	13	1,256	
Brentwood U	3	—	2	—	9	26	8	3	39	2	1	63	107	118	—	40	25	5	4	4	1	—	8	54	6	18	3	553		
Hornchurch U	5	—	2	3	26	79	19	6	120	8	9	174	213	189	1	48	87	8	8	7	10	3	—	15	87	11	20	14	1,172	
Thurrock U	4	—	2	3	29	47	17	8	81	7	7	113	214	108	1	56	56	4	2	3	2	3	—	8	75	14	22	16	902	
South Essex	12	—	6	6	64	152	44	17	240	17	17	350	534	415	2	144	168	17	14	14	16	7	—	31	216	31	60	33	2,627	
Harlow U	1	—	—	—	5	12	7	5	23	7	—	25	45	35	—	15	11	3	—	1	—	1	—	5	31	4	10	5	251	
Chingford B	2	—	2	—	11	29	7	1	50	1	3	44	110	67	1	15	24	2	5	1	—	6	28	5	6	—	422			
Wanstead & Woodford B	4	1	3	2	18	34	17	3	82	7	3	94	139	94	—	37	33	4	5	6	1	1	3	64	9	16	5	685		
Chigwell U	1	—	—	2	19	35	14	4	46	4	4	53	82	80	1	31	25	2	—	1	—	5	41	4	7	8	470			
Epping U	—	—	—	—	1	3	5	—	12	2	—	11	18	9	—	7	3	3	—	—	—	10	2	2	1	89				
Waltham Holy Cross U	—	—	—	—	2	4	—	6	—	1	10	27	14	—	5	4	—	1	1	—	—	4	10	—	4	—	93			
Forest †	7	1	5	4	51	105	43	8	196	14	11	212	376	264	2	95	89	11	11	8	1	4	1	18	153	20	35	14	1,759	
Epping & Ongar R	—	—	—	—	3	25	9	4	28	2	3	52	66	59	1	16	16	2	—	2	1	1	—	3	29	8	7	4	341	
Romford B	5	—	2	—	21	61	24	5	98	4	2	82	179	147	1	41	54	6	6	3	9	3	—	9	59	24	14	7	866	
Barking B	7	—	—	—	16	68	21	8	84	5	9	69	147	103	2	43	48	11	4	2	3	1	—	9	57	10	7	7	741	
Dagenham B	9	—	—	2	28	88	22	9	82	6	5	96	195	142	2	40	61	12	11	4	6	3	—	8	68	18	12	6	935	
Ilford B	6	—	1	3	55	95	53	17	211	11	11	227	392	292	3	134	112	11	12	12	14	6	—	15	158	26	38	22	1,937	
Leyton B	—	5	2	2	5	30	76	29	10	114	7	12	188	211	282	1	106	70	7	6	8	4	4	1	8	118	4	22	15	1,347
Walthamstow B	7	1	4	—	33	71	25	8	141	7	15	141	256	140	—	97	72	10	8	7	9	7	1	5	93	11	18	8	1,195	
ADMINISTRATIVE COUNTY	75	6	30	36*	475	1,092	403	140	1,958	122	150	2,652	4,044	2,887	26	1,177	1,038	162	119	101	99	72	4	185	1,568	246	362	193	19,422	
Administrative County, 1963	84	5	25	35	450	1,042	387	128	1,864	103	157	2,764	4,045	3,318	77	1,626	1,251	190	129	99	98	90	12	204	1,663	214	346	222	20,628	

* including whooping cough 4, meningococcal infections 1 and measles 1.

† excluding that part of Epping and Ongar R.D. in the Area

TABLE IV—INFECTIOUS AND OTHER NOTIFIABLE DISEASES, 1964

Health Area and County District	Scarlet fever	Whooping cough	Measles	Acute pneumonia	Tuberculosis respiratory	Tuberculosis meninges and C.N.S.	Tuberculosis other	Meningococcal infection	Acute poliomyelitis (paralytic)	Acute poliomyelitis (non-paralytic)	Dysentery	Ophthalmia neonatorum	Puerperal pyrexia	Para-typhoid fevers	Erysipelas	Food poisoning	Infective hepatitis	Others †	Total
Colchester B.	26	96	344	15	10	—	2	1	—	—	36	—	9	—	4	—	94	2	639
Harwich B.	8	6	7	3	3	—	1	—	—	—	48	—	—	—	2	1	—	1	80
Brightlingsea U.	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Clacton U.	9	14	15	—	6	—	2	—	—	—	—	5	—	1	—	—	—	1	53
Frinton & Walton U.	2	2	91	2	1	—	—	1	—	—	36	—	—	—	—	—	2	—	137
Halstead U.	—	4	19	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	25
West Mersea U.	—	—	4	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	5
Wivenhoe U.	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Halstead R.	6	22	41	3	4	—	—	—	—	—	2	—	—	—	—	—	—	—	78
Lexden & Winstree R.	10	14	149	22	5	1	—	—	—	—	2	—	—	—	5	—	4	—	212
Tendring R.	21	32	176	6	3	—	1	—	—	—	26	—	—	—	1	1	2	—	269
North-East Essex	56	94	504	36	24	1	4	2	—	—	120	—	1	—	8	4	6	2	862
Chelmsford B.	6	32	314	4	7	—	2	1	—	—	—	1	—	2	—	2	—	2	373
Maldon B.	1	—	212	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	215
Saffron Walden B.	—	78	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	80
Braintree & Bocking U.	17	18	18	—	4	—	1	—	—	—	—	—	—	—	—	1	—	—	59
Burnham-on-Crouch U.	—	8	24	1	1	—	—	—	—	—	—	—	—	—	2	—	1	—	37
Witham U.	1	1	71	—	2	—	—	—	—	—	6	—	—	—	—	—	—	—	81
Braintree R.	2	6	240	—	1	—	—	—	—	—	—	—	—	—	2	—	—	—	251
Chelmsford R.	30	37	269	2	13	—	2	—	—	—	—	3	—	—	—	—	—	—	359
Dunmow R.	7	25	80	1	5	—	1	—	—	—	35	—	—	—	2	—	2	—	124
Maldon R.	4	1	98	2	4	—	—	—	—	—	—	—	—	—	4	—	—	—	113
Saffron Walden R.	11	21	42	8	5	—	1	—	—	—	—	1	3	5	11	—	—	—	143
Mid-Essex	79	149	1,446	18	44	—	7	1	1	—	45	—	5	1	8	11	20	—	1,835
Basildon U.	65	76	745	1	12	—	1	—	—	—	6	39	—	1	1	50	—	—	997
Benfleet U.	7	6	36	4	9	—	2	1	—	—	14	—	—	1	1	1	23	2	107
Canvey Island U.	24	43	74	3	8	—	2	—	—	—	5	—	1	—	2	26	—	—	188
Rayleigh U.	18	5	169	43	3	—	—	—	—	—	6	1	73	—	4	1	8	1	252
Rochford R.	66	48	188	3	12	—	1	—	—	—	—	—	—	5	55	1	—	459	
South-East Essex	115	102	467	53	32	—	5	1	—	—	25	1	74	1	5	9	112	4	1,006
Brentwood U.	10	58	607	7	12	—	1	—	—	—	16	—	—	—	7	1	—	—	719
Hornchurch U.	72	121	745	7	46	—	6	1	1	1	7	2	4	—	4	18	61	1	1,097
Thurrock U.	85	141	696	48	33	1	7	2	—	—	10	—	5	46	—	2	—	2,1076	
South Essex	167	320	2,048	62	91	1	13	4	1	1	23	2	14	—	9	71	62	3	2,892
Harlow U.	93	52	1,224	10	42	—	5	—	—	—	27	—	4	—	7	1	88	1	1,554
Chingford B.	22	37	91	3	8	—	—	2	—	—	15	—	3	—	5	5	*	—	191
Wanstead & Woodford B.	13	44	210	3	9	—	2	—	—	—	8	—	11	—	7	5	*	—	312
Chigwell U.	48	28	62	1	8	—	1	—	—	—	8	—	1	—	2	6	*	2	167
Epping U.	5	6	50	—	5	—	—	2	—	—	4	—	—	—	1	*	—	—	73
Waltham Holy Cross U.	2	7	64	—	2	—	1	1	—	—	—	—	—	1	*	—	—	—	78
Forest	90	122	477	7	32	—	4	5	—	—	35	—	15	—	14	18	*	2	821
Epping & Ongar R.	4	40	172	—	13	1	—	—	—	—	27	—	1	—	2	4	14	—	278
Romford B.	51	79	767	3	36	—	4	—	—	—	12	2	—	—	4	—	23	1	982
Barking B.	39	50	131	9	23	—	1	2	—	—	3	2	1	—	5	6	*	7	279
Dagenham B.	43	63	701	9	25	2	1	—	—	—	4	2	—	—	2	1	*	1	855
Ilford B.	129	98	1,131	55	48	—	7	2	—	—	142	—	6	—	15	19	*	8	1,660
Leyton B.	51	38	131	21	31	—	3	1	—	—	65	—	2	—	6	—	*	—	349
Walthamstow B.	94	82	70	1	48	2	11	1	—	—	113	2	33	1	5	24	*	1	488
ADMINISTRATIVE COUNTY	1,102	1,461	10,358	300	511	7	68	21	2	1	677	17	204	3	95	169	469	32	15,497
Administrative County, 1963	985	1,858	26,333	571	550	3	72	10	5	1	1,780	15	199	4	85	147	129	49	32,796

† Including Typhoid Fever 6, Acute Encephalitis, Infective 5, Acute Encephalitis, Post-infectious 5, and Malaria 1.

* Not notifiable in these districts, therefore the total for the County of 469 is incomplete.

TABLE V—NUMBER OF PATIENTS RECEIVING COMMUNITY CARE ON 31st DECEMBER, 1964

TABLE VI—NUMBER OF PATIENTS REFERRED DURING YEAR ENDED 31st DECEMBER, 1964

REFERRED BY	MENTALLY ILL		PSYCHOPATHIC		SUBNORMAL		SEVERELY SUBNORMAL		TOTALS			
	Under age 16 over		Under age 16 over		Under age 16 over		Under age 16 over		16 and age 16 over		16 and age 16 over	
	M	F	M	F	M	F	M	F	M	F	M	F
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
General practitioners	—	—	8	24	—	—	—	—	—	1	2	—
Hospitals, on discharge from in-patient treatment	1	—	45	49	—	—	—	—	—	10	15	1
Hospitals, after or during out-patient or day treatment	—	—	11	24	—	—	—	—	1	—	4	3
Local education authorities	—	—	—	—	—	—	—	—	—	—	—	—
Police and courts	—	—	9	1	—	—	—	—	1	—	—	—
Other sources	—	—	65	74	—	—	—	—	—	10	2	27
Total	1	—	138	172	—	—	—	—	—	1	63	46
			58	79	73	58	44	10	9	122	90	227
												255
												694

RURAL HOUSING

TABLE VII—PROGRESS DURING 1964

		UNFIT		RURAL DISTRICTS									
Repair	Closure/Demolition	DWELLING-HOUSES DEMOLISHED CLOSED OR REPAIRED DURING 1964		RURAL DISTRICTS									Totals
		In Clearance Areas	Housing Act, 1957	Brantree	Chelmsford	Dunmow	Epping and Ongar	Halstead	Lexden and Winstree	Maldon	Rochford	Saffron Walden	
		(i) Dwelling-houses demolished		Unfit Houses									
				Other Houses									
				Persons Displaced									
		(ii) Houses demolished as a result of formal or informal action		Houses									21
				Persons Displaced									146
		(iii) Houses closed in pursuance of undertakings and as a result of Closing Orders		By Owners									60
				Persons displaced from houses to be closed									63
		(iv) Houses reconstructed, enlarged, or improved and Demolition Orders revoked.											
		(v) Houses made fit and houses in which defects were remedied after formal action by L.A.		By Owner									9
				By Local Authority									27
	Public Health Acts	(vi) Houses made fit and houses in which defects were remedied after formal action by L.A.		By Owner									
				By Local Authority									40
	Hsg or P. Health Acts	(vii) Houses made fit and houses in which defects were remedied after informal action by L.A.											
				81	20	—	106	171	223	76	7	21	125
		(viii) Local authority owned houses certified unfit by Medical Officer of Health		Houses									5
				Persons Displaced									5
(a) Total number of houses demolished or closed since 1/1/56 (totalled from returns)				342	155	443	175	311	345	180	207	309	317
(b) Local Authority's estimate of number of houses remaining unfit for human habitation				310	74	181	15+	313	89	171	—	128	220
(c) Period of years considered necessary by L.A. for dealing with (b)				4	3	1	2	1	2	5	—	5	10

TABLE VIII—HOUSING IMPROVEMENT GRANTS, 1964

Housing (Financial Provisions) ACT, 1958		HOUSE PURCHASE AND HOUSING ACT, 1959			
Rural Districts	Total of Grants made to 31.12.64 £ (1)	Applications Received	Applications Approved	Applications Received	Applications Approved
	Dwellings Concerned	No. of Dwellings	Total of Grants Paid £ (2)	No. of Dwellings Concerned	Total of Grants Paid £ (3)
	Conver- sions (4)	Improve- ments (4)	(5)	(6)	(7)
Braintree	119,359	—	17	11	4,109
Chelmsford	271,775	7	86	84	27,461
Dunmow	189,939	2	37	39	14,929
Epping & Ongar	114,950	—	20	20	7,723
Halstead	111,649	2	20	22	7,771
Lexden & Winstree	171,864	—	46	44	14,605
Maldon	89,698	3	60	3	15,160
Rochford	51,826	—	—	1	400
Saffron Walden	137,814	2	29	27	8,375
Tendring	68,729	—	19	22	6,736
TOTALS	1,327,603	16	334	272	107,296
					423
					391
					47,468

RURAL HOUSING

TABLE IX—Number of Houses Erected During 1964 and the Number of Applicants remaining on Waiting Lists

Rural District Council	No. of houses erected during the year ended 31st December, 1964		No. of applicants on waiting list for Council houses at 31st December, 1964, who are in urgent need of housing accommodation
	By the Council	By Private Enterprise	
Braintree	28 (4) 132 (148) 189 (116)
Chelmsford	144 (74) 628 (483) *300 (130)
Dunmow	38 (30) 203 (170) 60 (80)
Epping and Ongar	35 (44) 334 (288) 350 (300)
Halstead	16 (11) 184 (44) 100 (150)
Lexden and Winstree	81 (16) 562 (607) 356 (240)
Maldon	6 Nil 272 (216) 13 (19)
Rochford	29 (5) 560 (601) 149 (97)
Saffron Walden	38 (12) 112 (63) 175 (86)
Tendring	8 (2) 295 (178) 18 (60)
Totals	423 (198)	3,282 (2,798) 1,710 (1,418)

Note: 1963 figures given in parenthesis.

* Estimated figure. Doubtless there is also some degree of approximation in several other totals under the same heading.

TABLE X—SEWERAGE SCHEMES AND SEWAGE DISPOSAL IN RURAL ESSEX—PROGRESS REPORT

District Council	Schemes completed in 1964	Schemes under construction at 31.12.1964 and per cent. completed	Parishes in which schemes are anticipated to commence in 1965	Parishes in which schemes are phased for 1966/67	Parishes phased for 1967/71	Any remaining parishes which it is estimated may be able to be economically sewered
Braintree R.D.	Nil	Nil	Hatfield Peverel and Terling Cornish Hall End	Great Saling and Shalford Bradwell and Stisted Coggeshall and Kelvedon Rayne and Panfield White Notley Sewage Works enlargements		Blackmore End, Wethersfield.
Chelmsford R.D.	Danbury and other Parishes Scheme. Danbury, Lt. Badlow, Sandon and Boreham	Pleshey Good Easter (both 95% complete)	Woodham Ferrers Runwell Hospital Chase Extension	Bicknacre (Woodham Ferrers) East Hanningfield Roxwell Works Extensions West Hanningfield River Wid Scheme (Ingatesstone, Mountnessing, Stock and Margaretting) Ramsden Heath and Downham (South Hanningfield) Writtle Reconstructions Highwood Great Leighs Ford End and Howe St. (Gt. Waltham) Chignal Smealey Rettendon (Bell P.H. area)	Broomfield and Lt. Waltham (Valley sewer reconstructions) Springfield (Trunk Sewers)	
Dunmow R.D.	Great Easton and Duton Hill	Nil	Broxted Leaden Roding and Margaret Roding combined scheme Lower Chelmer Valley scheme (including sewer extensions in Gt. Dunmow and Barnston and construction of new disposal works at Felsted)	Takeley (Sewage Works extensions) depending on decision regarding Stansted Airport	None	Remainder of Lt. Canfield and part of Takeley. Other more sparsely populated rural areas may be economically sewered depending on result of pilot scheme at Broxted using extended aeration plant.
Epping and Ongar R.D.	Kelvedon Hatch	Stondon Massey 95%	Roydon—connection to Trunk Sewer Roydon—East End Lambourne — Hillmans Cottages Blackmore — Swallows Cross Extension Nazeing—Relief Scheme of S.D.W. Extension	Theydon Bois, S.D.W. Fyfield, Blatches Corner North Weald-Thornwood S.D.W. Stanford Rivers S.D.W. Extensions and Relief Sewers Theydon Bois S.D.W. Extensions	High Ongar-Nine Ashes Scheme High Laver-Tilegate Scheme North Weald-Hastingwood sewerage & S.D.W. Weald Bridge Road Lambourne-Abridge S.D.W. Extensions North Weald S.D.W. Abbess Roothing S.D.W.	Sewer extensions only (not sewerage schemes) at: Matching Green, Greenstead, Doddinghurst, Norton Heath, Theydon Mount, Stapleford Abbotts, Navestock, Shallow Bowells, Willingale, Matching, Roydon, Nazeing.

SAL IN RURAL ESSEX—PROGRESS REPORT

Parishes in which schemes are phased for 1966/67	Parishes phased for 1967/71	Any remaining parishes which it is estimated may be able to be economically sewered
Great Saling and Shalford Bradwell and Stisted Coggeshall and Kelvedon Rayne and Panfield White Notley Sewage Works enlargements		Blackmore End, Wethersfield.
Bicknacre (Woodham Ferrers) East Hanningfield Roxwell Works Extensions West Hanningfield River Wid Scheme (Ingatestone, Mountnessing, Stock and Margaretting) Ramsden Heath and Downham (South Hanningfield) Writtle Reconstructions Highwood Great Leighs Ford End and Howe St. (Gt. Waltham) Chignal Smealey Rettendon (Bell P.H. area)	Broomfield and Lt. Waltham (Valley sewer reconstructions) Springfield (Trunk Sewers)	
Takeley (Sewage Works extensions) depending on decision regarding Stansted Airport	None	Remainder of Lt. Canfield and part of Takeley. Other more sparsely populated rural areas may be economically sewered depending on result of pilot scheme at Broxted using extended aeration plant.
Theydon Bois, S.D.W. Fyfield, Blatches Corner North Weald-Thornwood S.D.W. Stanford Rivers S.D.W. Extensions and Relief Sewers Theydon Bois S.D.W. Extensions	High Ongar-Nine Ashes Scheme High Laver-Tilegate Scheme North Weald-Hastingwood sewerage & S.D.W. Weald Bridge Road Lambourne-Abridge S.D.W. Extensions North Weald S.D.W. Abbess Roothing S.D.W.	Sewer extensions only (not sewerage schemes) at: Matching Green, Greenstead, Doddingtonhurst, Norton Heath, Theydon Mount, Stapleford Abbotts, Navestock, Shallow Bowells, Willingale, Matching, Roydon, Nazeing.

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